CALIFORNIA ENERGY RESOURCES CONSERVATION

AND DEVELOPMENT COMMISSION

SITING COMMITTEE WORKSHOP

In the Matter of:)		
)		
Examining Critical Issues in)	Docket	00-SIT-2
the Licensing of Thermal)		
Power Plants and Related)		
Facilities)		

HEARING ROOM A

CALIFORNIA ENERGY COMMISSION

1516 NINTH STREET

SACRAMENTO, CALIFORNIA

WEDNESDAY, FEBRUARY 14, 2001

10:00 a.m.

Reported By: Valorie Phillips Contract No. 150-99-001

COMMITTEE MEMBERS PRESENT

Robert A. Laurie, Commissioner, Presiding Member

Robert Pernell, Associate Member

Scott Tomashefsky, Commissioner Advisor

Ellen Townsend-Smith, Commissioner Advisor

STAFF PRESENT

Bill Chamberlain, Chief Counsel

Chris Tooker

David Maul

Matt Layton

PETERS SHORTHAND REPORTING CORPORATION (916) 362-2345

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1	PROCEEDINGS
2	PRESIDING MEMBER LAURIE: Ladies and
3	gentlemen, good morning, and welcome to our
4	workshop on the issue of Air Emission Offsets and
5	Availability.
6	My name is Robert Laurie, Commissioner
7	at the California Energy Commission. I have the
8	pleasure of serving as Presiding Member of the
9	Commission's Licensing Committee. To my right is
10	my colleague and partner on the Committee,
11	Commissioner Robert Pernell. And to Commissioner
12	Pernell's right is Commissioner Pernell's Advisor,
13	Ellie Townsend-Smith.
14	A little bit of background as to our
15	purpose for gathering here today. The Commission
16	has determined that in our licensing process we
17	have determined that potential barriers exist to
18	the future licensing of power plants, and we have
19	determined to study those potential barriers.
20	Those barriers include air emission standards and
21	availability of offsets; gas constraints;
22	transmission constraints; water constraints; local
23	opposition issues. We will not touch upon in this
24	report, but certainly the status of the market is
25	a major issue that will determine whether we do or

- do not have adequate power.
- 2 So this is the third in a series of
- 3 workshops. The Committee will issue a report to
- 4 the full Commission, hopefully in April, that will
- 5 summarize our findings on these barriers and
- 6 determine whether, in fact, the barriers are real,
- 7 and if so, what our recommendations may be to deal
- 8 with such.
- 9 So we're very pleased today to deal with
- 10 the important question of air emission standards,
- 11 what they are, what the offset program is, how we
- 12 deal with it, whether they're available, and how
- it all might affect the ability to put electrons
- on the wires in the future.
- 15 Commissioner Pernell, do you have any
- 16 thoughts you'd like to convey at this time?
- 17 COMMISSIONER PERNELL: I'd just -- just
- 18 like to say good morning, welcome. And this
- 19 workshop will be very informative, so we expect
- 20 everybody's participation, and hopefully we'll all
- 21 leave more enlightened as we go forward to -- to
- meet California's energy challenge.
- Thank you.
- 24 PRESIDING MEMBER LAURIE; Thank you,
- 25 Commissioner.

1 At this time I'd like to call on Chris

- 2 Tooker, who will briefly review the agenda,
- introduce our esteemed panelists, and gentlemen,
- 4 good morning. Thank you very much for taking your
- 5 time to share your thoughts with us today.
- 6 Let me -- we will provide an opportunity
- 7 for public questions or comment at the end of each
- 8 panel. If, because of time constraints or
- 9 otherwise you have a need to express yourself
- 10 earlier, then our Public Adviser, Roberta
- 11 Mendonca, is hanging out here somewhere, right in
- 12 the center of the room. Please let her know, and
- we will attempt to accommodate your needs.
- 14 At this time I call on Mr. Tooker. You
- 15 have all received, or there is available a Staff
- 16 paper on the issue, which is our starting point
- for discussion.
- 18 Chris, I assume you're going to call
- 19 upon Matt or someone else to summarize that paper.
- Is that correct?
- MR. TOOKER: That's correct,
- 22 Commissioner
- PRESIDING MEMBER LAURIE: Why don't you
- go ahead and pull that microphone really close to
- you, because it's not picking up very well.

- 2 amplifying system is poor, so you have to get very
- 3 close to those microphones and speak up, otherwise
- 4 our audience will not hear you.
- 5 Do you know if this being broadcast on
- 6 the Web?
- 7 MR. TOOKER: I believe it is.
- 8 PRESIDING MEMBER LAURIE: Okay. That's
- 9 another reason why we must attempt to be as
- 10 articulate as possible.
- 11 Mr. Tooker.
- MR. TOOKER: Thank you, Commissioner
- 13 Laurie.
- 14 As you can see from our agenda, we have
- 15 two panels today, one in the morning on Emission
- 16 Offset Regulatory Requirements, and then in the
- 17 afternoon a panel on Innovative Offset Sources and
- 18 Solutions --
- 19 PRESIDING MEMBER LAURIE: Okay. Let me
- 20 stop you right there. Can anybody -- can
- 21 everybody hear? How about the back row, can you
- hear Mr. Tooker?
- No. You folks really have to amplify.
- 24 And --
- 25 MR. TOOKER: Okay. Can you hear me now?

1 PRESIDING MEMBER LAURIE: Yes, much

- 2 better.
- MR. TOOKER: Okay. This morning we have
- 4 a number of panel members who are going to be
- 5 making presentations. As well, we have in the
- 6 audience other individuals who may want to speak
- 7 to some of these issues, or to ask questions, and
- 8 we expect, as you say, that they will have an
- 9 opportunity to speak.
- 10 I would like first to go around the
- 11 table and have people introduce themselves, and
- 12 then we will begin with a Staff presentation or
- 13 summary of the Staff background paper, and then
- proceed with the individual panel members.
- 15 PRESIDING MEMBER LAURIE: Excellent.
- 16 Thank you.
- MR. TOOKER: So, to my left.
- 18 MR. NAZEMI: Good morning. I'm Mohsen
- 19 Nazemi, Assistant Deputy Executive Officer for
- 20 South Coast Air Quality Management District.
- 21 PRESIDING MEMBER LAURIE: Welcome, sir.
- MR. WALTERS: Good morning. I'm William
- 23 Walters. I'm with Aspen Environmental Group, a
- 24 consultant with the CEC. I was the main author of
- 25 the -- of the paper.

1 PRESIDING MEMBER LAURIE: Welcome, Mr.

- Walters.
- 3 MR. MOORE: Steven Moore, Senior
- 4 Engineer with the San Diego Air Pollution Control
- 5 District.
- 6 PRESIDING MEMBER LAURIE: Thank you.
- 7 MR. NGUYEN: Hi. Duong Nguyen, I'm with
- 8 the EPA Air Permits Office in San Francisco.
- 9 PRESIDING MEMBER LAURIE: Thank you, Mr.
- 10 Nguyen.
- 11 MR. POSPISIL: Good morning. Neal
- 12 Pospisil, Director of Environmental Health and
- 13 Safety with Calpine Corporation.
- 14 PRESIDING MEMBER LAURIE: Thank you.
- MS. RUDERMAN-FEUER: Good morning. I'm
- Gail Ruderman-Feuer. I'm a Senior Attorney with
- 17 the Natural Resources Defense Council.
- 18 PRESIDING MEMBER LAURIE: Thank you,
- 19 ma'am. Welcome.
- Thank you.
- MR. TOOKER: Thank you. Before we
- 22 proceed --
- 23 PRESIDING MEMBER LAURIE: Did I earlier
- refer to gentlemen? If I did, I deeply apologize.
- My apologies.

1	MΥ	Tooker.

- MR. TOOKER: Before we proceed with the

 presentation of the Staff's -- summary of the

 Staff's paper, I just want to ask each of the

 presenters to make sure that they provide a -- if

 they have a presentation in writing, that they

 provide a copy to Mr. Matt Layton, so we can have

 -- make sure that we have a copy to be docketed

 for the record.
- 10 And with that, I would ask Mr. Walters

 11 to provide a brief summary of the Staff background

 12 paper on Emission Offset Availability Issues.
- Mr. Walters.

18

24

MR. WALTERS: Again, good morning.

to begin, as background.

- This paper was written in the context of licensing power plants, and for the most part dealing with those that are jurisdictional. Just
- 19 The offsets requirements are regulated
 20 both by the federal government and state
 21 government, specifically, in terms of attainment,
 22 or to get attainment of ambient air quality
 23 regulations. One of the methods in which they do

that for large major sources is requiring the

sources and their emissions be offset with an

1 equivalent or greater reduction of pollutants from

- 2 generally the same area.
- 3 PRESIDING MEMBER LAURIE: Does state law
- 4 preempt -- excuse me, does federal law preempt?
- 5 MR. WALTERS: Not necessarily, no.
- 6 State law tends to be a little more stringent than
- 7 the federal law in -- well, pretty much in all
- 8 cases, for offsets.
- 9 PRESIDING MEMBER LAURIE: So as to air
- 10 standards, states do have the independent
- 11 authority to develop standards in excess of
- 12 federal standards.
- 13 MR. WALTERS: They have the authority,
- and the local districts also are -- are -- have
- been delegated the PSD authority.
- 16 And the -- the requirements from
- district to district do vary, based on the
- 18 attainment status of each district, so that some
- 19 districts have much more severe requirements for
- offsetting, and some districts that are in
- 21 attainment essentially have no requirements for
- 22 offsetting, assuming that the modeled impact of
- the source does not create new non-attainment
- events.
- The general way in which the emission

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1 reduction credits or offsets are attained are
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- 2 through emission reduction credits. The emission
- 3 reduction credits are generally done through
- 4 banking requirements, which is another regulatory
- 5 framework which is both put into the federal,
- 6 state and local regulations. Emissions
- 7 reductions, which are enforceable, quantifiable,
- 8 surplus, are -- can be banked at the local
- 9 districts and then they can be used to offset new
- 10 major sources of air pollution.
- 11 In terms of strategies of offsetting,
- there -- there have been many that have been used,
- depending on the situation, on the availability of
- 14 banked credits and desirability of specific
- 15 attainment solutions. Some of these --
- 16 COMMISSIONER PERNELL: Excuse me. On
- 17 the -- on the issue of banking the credits, is
- that per air district, or can South Coast bank
- 19 credits and be used in San Diego, for example?
- 20 MR. WALTERS: I'll be getting to that
- 21 shortly, in terms of the use of inter -- inter-
- 22 district credits.
- 23 COMMISSIONER PERNELL: Okay.
- MR. WALTER: Credits are banked
- 25 initially in the district in which they are

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created. The strategies to using ERCs include
 1
         just using specifically the pollutants that are
 2
         required. If -- if a new plant is going to have
 3
         150 tons of NOx, it will have to offset that and
         any additional offset ratio based on where the
         emission credits may be from, whether they're
         internal or not. So the amount of the credits
         will be specified based on the specific situation
 9
         of the emission reduction credits that will be
10
        used to offset the source.
11
                   Other strategies include the use of
         inter-district offsets, specifically in the
12
         situation of -- of downwind, where you have an
13
14
         area that is in a -- a lower status of non-
         attainment. A good example is Mojave Desert can
15
16
         use emission reduction credits from South Coast,
17
         as Mojave's problem is -- is primarily transported
18
         pollutants from -- from the South Coast to the San
         Joaquin Valley. In fact, they also can use San
19
         Joaquin Valley credits; at least in their rules
20
21
         they allow that.
                   Another strategy is to inter-pollutant
2.2
         offset or emission reduction credits to offset.
23
```

23 offset or emission reduction credits to offset.

24 That is done specifically or primarily for

25 precursor pollutants, which would be ozone and

1 PM10. So you can, in most cases, use VOC emission

- 2 reduction credits to offset NOx, and you can often
- 3 use SO2, VOC and NOx emission credits to offset
- 4 PM10 emissions.
- 5 Each district is a little different on
- 6 how they enforce and the emission offset ratios
- 7 that they apply to each of these situations.
- 8 Another strategy is using inter-sector
- 9 emission reduction credits. That is essentially
- 10 using emission reduction credits that you get from
- 11 a non-stationary source and apply it to a
- 12 stationary source. Examples would be emission
- 13 reduction credits from mobile emission sources,
- emission reduction credits from road paving,
- agricultural or other area sources.
- 16 PRESIDING MEMBER LAURIE: Can you
- 17 explain the relationship between CARB and the
- 18 local districts? What's the legal relationship
- 19 between the two different types of entities?
- 20 MR. WALTERS: Well, generally, for --
- 21 for permitting requirements, the local districts
- have all of the authority. They have been
- 23 delegated by EPA. And -- and I'll probably defer
- 24 to -- to our panelist from CARB to give you that
- 25 --

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1 PRESIDING MEMBER LAURIE: So I -- okay.
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- Well, I -- I'm going to ask our panelists, to the
- 3 extent that you represent those agencies, to
- 4 clarify that, whether you are representatives of a
- federal agency, whether you're representatives of
- 6 the state agency, whether you're independent
- 7 entities. It -- it'd be helpful.
- 8 MR. WALTERS: Now, in terms of using
- 9 emission reduction credits, generally there --
- 10 there are two ways you can do it. You can use
- internal credits that you already have at the
- 12 site, or you can gain from the site. This
- particularly will work for repowering of existing
- dirtier power plants, or perhaps putting in a
- 15 power plant at another large major source where
- 16 they could reduce emissions, whether that would be
- 17 a refinery or a -- a large smelter, or something
- 18 like that.
- 19 The other -- and the main method for
- 20 direction of -- of offsets is the use of banked
- 21 ERCs. That is generally a free market trading
- 22 that is done by and/or for the districts. And --
- and that essentially requires the payment to other
- 24 parties for the emission reduction credits that
- have been banked.

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Emission reduction credit availability
 1
 2
         is -- is very different in different regions in
         the state. As you can see in the -- in the table
 3
         in the paper, there's very few emission reduction
         credits currently available in San Diego, while
         there's quite a bit of emission reduction credits
         available in the San Joaquin Valley. In other
         areas of the state there may essentially be no
 9
         emission reduction credits available. Many of
10
         those areas, of course, are more rural and
11
         therefore never had large stationary sources to
         obtain emission reduction credits from.
12
                   PRESIDING MEMBER LAURIE: So if -- if no
13
14
         ERC are available at any price, or any reasonable
         price, what alternatives do we have -- and Chris,
15
16
         if you want me to delay this question because it's
17
         the subject of our second panel, I will. What
18
         alternatives does one have to mitigate the air
         impacts of their project. Are alternatives
19
         available, or does no ERC equate to no project of
20
21
         any sort?
                   MR. TOOKER: Well, one thing I might say
2.2
         is that there are alternatives in terms of inter-
23
         basin trading and so forth to obtain offsets from
24
         other districts, if they are not available in
2.5
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1 areas such as Mojave. To the extent that that's a

- 2 relevant issue and part of the rules allow it, for
- instance, for South Coast, Mr. Nazemi will
- 4 probably speak to that. But I think in general,
- 5 to the extent that there are no offsets in a bank,
- 6 they need to be created and/or gotten from -- from
- 7 another district within the air basin.
- 8 PRESIDING MEMBER LAURIE: Okay. And I
- 9 -- I believe that is to be the primary subject of
- 10 Panel 2. My concern, of course, is that we're
- 11 locked into a single source solution, and that's
- going to be certainly of interest to us.
- 13 MR. TOOKER: And I think the purpose of
- this morning's panel is to describe the regulatory
- 15 structure which in those opportunities might be
- 16 available.
- 17 PRESIDING MEMBER LAURIE: Well, maybe we
- 18 can get to that if I stop asking questions.
- 19 (Laughter.)
- 20 MR. WALTERS: The cost of offsets had
- 21 been increasing throughout the years, probably
- 22 more dramatically in the last couple of years, at
- least in terms of some of the licensing cases that
- 24 we've seen. A lot of that has to do with the lack
- of availability, as you might expect, from a --

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1 from a market demand perspective. In looking at
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- 2 the -- at the general costs, a -- a typical power
- 3 plant, 27F frame, with typical BACT controls, the
- 4 -- the offset requirements could -- could run as
- 5 much as \$6 million, or more, depending on the --
- on the basin and availability and cost of offsets
- 7 in that specific basin.
- 8 Now, the cost to create offsets can also
- 9 be similarly as high, depending on -- on the
- 10 availability of uncontrolled sources and how
- 11 easily they can be controlled.
- 12 The --
- 13 PRESIDING MEMBER LAURIE: Do we -- do
- 14 you have -- do any of the panelists have data
- 15 showing, or are you going to be talking about
- 16 where offsets are available and where they are
- 17 not? So does anybody own a map that says offsets
- available here, they're not available there?
- 19 Anybody going to be talking about that at all?
- MR. TOOKER: I think some of the
- 21 speakers will be -- will be talking about the
- 22 question of availability. I'm not sure that they
- have a map showing --
- 24 PRESIDING MEMBER LAURIE; Yeah. Well, I
- 25 -- I use that figuratively, so. Because the

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1 question, of course, is that if you're going to
```

- build a power plant, no offsets available or too
- 3 tricky to get them, you're going to build a power
- 4 plant where credits are available and it's not the
- 5 right place to build a power plant. Same issue
- 6 with -- with water, natural gas, or -- or anything
- 7 else.
- MR. TOOKER: Correct.
- 9 MR. WALTERS: Now, there are a lot of
- 10 different sources for offsets. And in terms of
- 11 the issues, the question on -- on those to some
- 12 extent is the -- the enforceability
- 13 quantification, et cetera. Some of the sources
- where you can -- where you can obtain ERCs to
- 15 offset a power plant would be at an existing major
- 16 source. As I indicated earlier, a repowering
- 17 project, for example, or perhaps controlling
- another major source and putting a power plant
- 19 nearby to use a low ERC offset ratio.
- 20 Other potential sources include mobile
- 21 emission reduction credits, MERCs, which have been
- 22 used on -- in selected cases. Reduction of
- 23 sources from agriculture can be used, specifically
- 2.4 --
- 25 PRESIDING MEMBER LAURIE: Does that mean

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taking agriculture out of production?
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- 2 MR. WALTERS: No, not necessarily. That
- 3 -- that can be replacing water pumps that are very
- dirty, diesels, dust reduction methods in the
- field, et cetera. As long as those -- those
- 6 methods can be quantified and enforced, et cetera,
- 7 to meet the ERC requirements.
- 8 COMMISSIONER PERNELL: And who does
- 9 that, the air district? I mean, who -- if I want
- 10 to create offsets by -- by taking out of
- 11 production a couple of pumps and a couple of big
- dirty diesels, who do I go to to say I'm taking
- this off, I want to bank some credits?
- 14 MR. WALTERS: Well, in terms of the
- 15 banking, you provide the information to the
- 16 district. And also, in terms of getting
- 17 information on where you may be able to find
- 18 higher polluting sources, you can get that from
- 19 the district. In terms of who will have to
- 20 actually create the offsets, right now that would
- 21 be to the third party, and would not necessarily
- be done by the district, with the exception of the
- 23 Carl Moyer fund, and a few other things that are
- 24 being done for mobile emission sources that --
- that are currently funded.

1 COMMISSIONER PERNELL: So that would be

- 2 through a third party.
- MR. WALTERS: Well, that would be, say,
- 4 a power plant proponent.
- 5 COMMISSIONER PERNELL: Oh, right.
- 6 Right. Okay. I was putting myself in that
- 7 position.
- 8 MR. WALTERS: Some other -- okay. Some
- 9 other potential sources would be military base
- 10 closures. In some areas there have been a rather
- 11 significant amount of base closures that may be
- 12 able to be used.
- 13 Fugitive dust. Emission credits for
- 14 PM10. PM10 is one of the more problematic
- pollutants, in terms of getting ERCs in many
- 16 districts.
- 17 The potential for energy efficiency, for
- 18 area sources. You may be able to get some
- emission reduction credits that way, again, if
- they're enforceable and quantifiable.
- 21 Some other issues that may impact offset
- 22 structure will be the new pollutant standards that
- have been proposed by EPA, but not yet
- implemented, namely the eight-hour ozone standard
- and the PM2.5 standard. The attainment of

specific districts may change if the PM10 standard

- 2 is dropped and the PM2.5 standard is started.
- 3 Certain areas may be in attainment for a 2.5,
- 4 where they're in a non-attainment for PM10, and
- 5 it'll basically change the structure and need of
- 6 offsets for projects.
- 7 Other issues are the free market trading
- 8 and potential for credit hoarding. In the -- in
- 9 the current free market there is -- there is the
- 10 potential for misuse of emission reduction credits
- 11 to basically limit availability by speculative
- 12 accumulation, and other means.
- PRESIDING MEMBER LAURIE: Why would that
- 14 be misuse?
- 15 MR. WALTERS: Basically, that would be
- 16 not allowing a specific company that say hasn't
- 17 gotten into the market early, wants to site a
- power plant, not to be able to get emission
- 19 reduction credits because essentially they have
- 20 been -- they have been bought up by someone else
- 21 basically speculatively --
- 22 PRESIDING MEMBER LAURIE: Is that --
- MR. WALTERS: -- trying to trade.
- 24 PRESIDING MEMBER LAURIE: -- is that
- 25 unlawful?

1 MR. WALTERS: No, it's not. But it is

- 2 --
- 3 PRESIDING MEMBER LAURIE: So --
- 4 MR. WALTERS: -- but it is an issue,
- 5 much like the Hunts trying to take over the silver
- 6 market. Of course, that was unlawful.
- 7 PRESIDING MEMBER LAURIE: So would it be
- 8 more fair to say that it's a detrimental use as
- 9 opposed to a misuse? And if something is -- is an
- 10 allowable action, but arguably is not good for the
- 11 system --
- 12 MR. WALTERS: I would agree. I would
- agree with that. Detrimental is -- is a better --
- 14 better terminology.
- 15 Currently in the South Coast they are
- 16 considering changing their system. Right now,
- 17 power generation sources are in the RECLAIM
- 18 market, and they are considering taking those
- 19 sources out of the RECLAIM market, and I believe
- 20 we have a representative of South Coast who will
- 21 go into that in a little more -- little more
- depth.
- The other issue that comes along with
- 24 creation of ERCs is whether or not you can
- 25 quantify them, whether they're enforceable, and I

1 believe we have a representative from EPA to cover

- 2 that particular issue.
- 3 Changes in attainment status for various
- 4 districts will change the offset requirements, so
- 5 if a district can come into attainment the
- 6 requirements lessen, or if the severity of the
- 7 non-attainment changes in either direction the
- 8 amount, or the trigger level for the offsets can
- 9 change.
- 10 Also, not getting an attainment by
- 11 specific dates will increase the offset ratios
- required for projects, and lower the trigger
- levels.
- 14 And another issue is -- is the potential
- 15 for better control technology at new licensing
- 16 power plants, and project sizing to fit the offset
- 17 structure of particular districts.
- 18 One quick example might be if you have a
- 19 district where the offset thresholds are at 100
- 20 tons. You size the project so that it essentially
- 21 can be under 100 tons, and if a 27F frame is 150,
- then you would size it with 17F.
- 23 And that -- that is basically most of
- the information provided in the paper.
- 25 PRESIDING MEMBER LAURIE: Thank you,

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1 sir, very much.
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- 2 Chris.
- MR. TOOKER: Thank you very much.
- 4 Our next speaker is Duong Nguyen, from
- 5 EPA, who will be talking about the role of
- 6 emission offsets in Clean Air Act implementation.
- 7 Duong.
- 8 PRESIDING MEMBER LAURIE: Mr. Nguyen,
- 9 good morning.
- 10 MR. NGUYEN: Hi.
- 11 PRESIDING MEMBER LAURIE: Get really
- 12 close to the microphone, please.
- 13 MR. NGUYEN: Okay. I was asked here by
- 14 Chris Tooker to talk briefly about the offset
- 15 requirements from the federal point of view, and
- 16 how -- and the role that these offsets play in the
- 17 implementation of the Clean Air Act. I'm here to
- 18 take notes. I'm not here to -- I'm not prepared
- 19 to present any EPA views on the current power
- 20 plant situation and the energy crunch.
- 21 But I'll talk briefly about the offset
- 22 requirements from the federal standpoint.
- As you all know, the Clean Air Act
- 24 requires that new or modified major sources in
- 25 non-attainment areas obtain offsets or emission

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1 reduction credits from the same source, or from
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- other sources located in the same -- same area.
- 3 Offsets can be obtained in another non-attainment
- 4 area if, one, the other area has an equal or
- 5 higher non-attainment classification status than
- the area in which the proposed source is located;
- and, two, if emissions from the other area
- 8 contributed to a violation -- by the source that
- 9 is -- by the proposed source, in the area in which
- 10 the proposed source is located.
- 11 The offset threshold and ratio depend on
- the non-attainment area's classification. The
- 13 more severe the non-attainment status, the higher
- the offset ratio and the lower the offset
- threshold.
- 16 In order to implement these offset
- 17 requirements, EPA has come up with offset
- policies, and first of all, offsets must be real,
- 19 quantifiable, enforceable, surplus, and permanent.
- 20 I'm sure a lot of -- of the people in the room are
- 21 aware of these criteria. And offsets must be
- fairly enforceable prior to the issuance of a
- 23 construction permit. The offsets also must have
- 24 been achieved by the time the source commences
- 25 operation.

 $2\,4$

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1 In another area we also allow pre-1990
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- 2 offsets. However, these offsets can be used only
- 3 if they were included in the inventory of -- of
- 4 the -- for the reasonable progress -- I mean, of
- 5 the reasonable further progress, and the rate of
- 6 progress planned. And if they were included in
- 7 demonstration attainment plans, and if they were
- 8 otherwise creditable.
- 9 The offsets must also be RACT adjusted
- 10 at time of use, and --
- 11 MR. TOOKER: Could you explain RACT
- 12 adjustment please, Duong?
- 13 MR. NGUYEN: Well, RACT adjustment
- 14 simply means that at the time the applicant or the
- 15 source is ready to put the offsets into use, these
- offsets must be adjusted according to whatever,
- 17 you know, RACT, reasonable available control
- 18 technology, is available, or is current at the
- 19 moment.
- MR. TOOKER: Okay.
- 21 MR. NGUYEN: At this time we are also
- 22 keenly aware of -- of the need for offsets, and as
- a result we have allowed several offset
- 24 alternatives. One is that we have allowed inter-
- district, inter-basin offsets. This type of

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offsets is allowed by the Clean Air Act, by the
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- 2 California Health and Safety Code, and by some
- 3 district SIPS.
- 4 Of course, there's also inter-pollutant
- 5 and inter-basin -- I mean, inter-precursor
- 6 offsets. Our economic incentive program does make
- 7 allowances for these types of trades between NOx
- 8 and VOC. Some SIPs also allow for inter-pollutant
- 9 trading. Region 9 has allowed inter-pollutant
- 10 trading for VOC, between VOC and NOx, and SOx and
- 11 PM10. Other regions have not allowed these
- trades. In general, we do not encourage this type
- of trades due to uncertainties in modeling
- 14 analysis, the difficulties in establishing an
- 15 acceptable trading ratio, and the effects of such
- 16 trades on -- on the SIPs attainment demonstration.
- 17 We are keenly aware of the need for
- 18 offset alternatives, and we're having discussions
- 19 at the regional and headquarters level on how to
- 20 deal with -- how to deal with this issue. We're
- 21 considering the legal, the technical, and the
- 22 policy implications that this issue may have, and
- if we have, you know, any guidance or uniform
- 24 policy that we can come up with in the future,
- 25 we'll certainly communicate it to industry and to

- 1 regulatory agencies.
- 2 The other type of offset alternative is
- 3 mobile emission reduction credits, MERCs. We
- 4 recently allowed this type of trade for a power
- 5 plant project in San Diego, but the approval was
- 6 based on a case by case basis, and we imposed
- 7 pretty strict and narrow restrictions to make sure
- 8 that the -- the offsets would conform with the
- 9 Clean Air Act.
- 10 Let me touch on -- on how offsets can
- 11 play into the attainment picture. As you know,
- 12 non-attainment districts have to submit SIPs to
- 13 bring areas into attainment by -- by timetable
- deadlines that are stipulated in the Clean Air
- 15 Act. And reasonable further progress
- 16 demonstrations for ozone non-attainment areas must
- 17 include provisions to reduce emissions by mandated
- 18 percentages that are specified in the -- in the
- 19 Clean Air Act.
- 20 Offset ratios for VOCs required to
- 21 achieve the reductions are set according to the
- 22 non-attainment classification status. The higher
- the classification, the higher the ratio.
- 24 Then let me talk about the consequences
- of failure to attain by the timetable deadline.

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1 When that happens, the air's non-attainment
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- 2 classification is bumped up. The district must
- 3 submit a revised SIP after the classification has
- 4 been bumped up. Major source threshold is
- 5 lowered, and as a result a lot of sources would
- 6 fall into Title 5 and NSR universe that they would
- 7 not have otherwise.
- 8 Then additional RACT rules will become
- 9 applicable and will be imposed. Furthermore, a
- 10 penalty fee is imposed on sources in severe or
- 11 extreme non-attainment areas. The offset ratio is
- 12 increased. And lastly, if the district fails to
- 13 correct the SIP -- or SIP efficiencies, or submit
- revisions to a SIP within 18 months, then
- 15 sanctions will apply. One of those sanctions is a
- 16 prohibition on highway projects and grants. The
- other sanction is that the offset ratio will jump
- 18 to two to one for new or modified sources that are
- 19 subject to NSR.
- 20 PRESIDING MEMBER LAURIE: Okay. Thank
- 21 you, sir.
- 22 COMMISSIONER PERNELL: A couple of
- 23 questions.
- 24 PRESIDING MEMBER LAURIE: Commissioner
- 25 Pernell.

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1	COMMISSIONER	PERNELL:	The	the

- 2 federal rules are pretty transparent, and are they
- 3 in line with what the state does, in terms of
- 4 mobile offsets and -- and transferring offsets
- 5 between districts or basins?
- I quess this question is for someone
- 7 from the state.
- 8 MR. NGUYEN: As far as mobile -- mobile
- 9 offsets are concerned, if a district SIP has such
- 10 provisions, we will certainly consider --
- 11 COMMISSIONER PERNELL: But -- but the
- district has to have those provisions in their
- 13 regulations?
- 14 MR. NGUYEN: As far as I know. I don't
- 15 think we have any provisions for such offsets in
- the Clean Air Act.
- 17 COMMISSIONER PERNELL; And then do you
- guys -- you, the federal government allows
- 19 transfers of offsets between districts and air
- 20 basins?
- MR. NGUYEN: Yes, inter-basin offsets
- 22 are allowed. Inter-district, inter-basin offsets.
- 23 COMMISSIONER PERNELL: Do those
- 24 districts or basins have to be connected, or can
- 25 we do a basin in the southern part of the state to

1 transfer credits to a basin in the northern part

- 2 of the state?
- 3 MR. NGUYEN: When we allow inter-basin
- 4 offsets we want to make sure that the -- the
- 5 offsets in which -- I mean, the basin in which the
- 6 offsets are generated upwind of the -- the basin
- 7 or the area in which the source is located, to
- 8 make sure that there is a net air quality benefit.
- 9 COMMISSIONER PERNELL: Okay. Thank you.
- 10 PRESIDING MEMBER LAURIE: Thank you,
- 11 sir.
- MR. TOOKER: Thank you, Duong.
- 13 Our next speaker is Mohsen Nazemi, from
- 14 the South Coast Air Quality Management District.
- Mohsen.
- 16 PRESIDING MEMBER LAURIE: Thank you.
- 17 Welcome, Mr. Nazemi.
- I -- I don't hear well. Old war injury,
- 19 or too many beers during certain years. So the
- audience may be able to hear, but I'm having a
- 21 difficult time doing so. So I think you need to
- be within an inch or two of that microphone.
- Thank you, sir.
- 24 MR. NAZEMI: Good morning. I'm Mohsen
- 25 Nazemi, with South Coast Air Quality Management

District, and I'm responsible for permitting and

- 2 compliance of stationary sources within the South
- 3 Coast region.
- 4 PRESIDING MEMBER LAURIE: And that
- 5 includes what geographical area?
- 6 MR. NAZEMI: I'm sorry.
- 7 PRESIDING MEMBER LAURIE: That includes
- 8 what geographical area?
- 9 MR. NAZEMI: Thank you. I was going to
- 10 say that. The --
- 11 PRESIDING MEMBER LAURIE: Sorry.
- 12 MR. NAZEMI: -- South Coast Air Quality
- 13 Management District covers four counties, Los
- 14 Angeles, Orange, Riverside, and San Bernardino.
- 15 The area is 6,700 square mile, and about 50
- million population, 29,000 facilities, and about
- 17 60,000 permits for those facilities.
- 18 I have a power point presentation. If
- 19 we could turn it on I would appreciate it.
- 20 You had asked, Commissioner, earlier, a
- 21 question about CARB authority relative to the
- 22 permitting of power plants, and maybe quickly,
- while the presentation is being loaded, I can
- answer that.
- The local districts in California, all

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1 35 of them, have primary responsibility for
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- 2 permitting of facilities, with the exception of
- 3 the power plants that are 50 megawatts or greater,
- 4 which the -- the sole authority lies with the
- 5 California Energy Commission.
- 6 The Air Resources Board has
- 7 responsibility mainly for mobile sources, but they
- 8 are an oversight agency. The EPA is also the
- 9 oversight agency associated with permitting of
- 10 power plants, and what normally happens is if a
- 11 power plant goes through local district
- permitting, then before a final permit is granted
- a draft proposal goes to both ARB and EPA for
- their comments.
- 15 The comments are received and considered
- 16 and addressed before a final permit is issued.
- 17 However, EPA, under the Title 5 program, has the
- 18 veto authority on the permits, and --
- 19 PRESIDING MEMBER LAURIE: What about
- 20 CARB?
- MR. NAZEMI: Air Resources Board, to the
- best of my knowledge -- I am not an attorney, so
- the attorneys probably should debate this -- does
- not have a veto authority over a permit. But they
- do have an oversight, overall general

- 1 responsibility.
- 2 MR. TOOKER: Commissioner Laurie, if I
- 3 might --
- 4 MR. NGUYEN: That's right. EPA has the
- 5 final objection power over Title 5 permits.
- 6 PRESIDING MEMBER LAURIE: Okay.
- 7 MR. TOOKER: If I might speak
- 8 specifically to your question about ARB's role.
- 9 Based on past experience, I know that although ARB
- 10 does not have the possibility of overruling a
- 11 district on an individual project basis, they do
- have the ability to take over their programs, and
- 13 if they are to take any action at all it would be
- 14 at the program level of taking over their permit
- 15 programs, but not on an individual case by case
- 16 basis.
- 17 PRESIDING MEMBER LAURIE: Okay.
- 18 MR. NAZEMI: What I would like to do
- 19 this morning is to give you a very brief overview
- 20 of the offset requirements, and applicability to
- 21 siting of power plants. And I would like to
- initially just caveat this with the recent
- 23 executive orders that were issued by Governor
- 24 Davis, and I'm not going to try to get into that
- 25 during my presentation, but I just want to point

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that out, that that may change temporarily the --
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- 2 the overall presentation of offsets requirements.
- 3 Let me see if I can move the slides.
- 4 The offset requirements apply --
- 5 MR. TOOKER: It's kind of hard. You
- 6 have to -- behind you.
- 7 COMMISSIONER PERNELL: It's not on that
- 8 TV right there?
- 9 MR. TOOKER: There we go.
- 10 MR. NAZEMI: The TV's off. It would
- 11 help if it was on.
- The emission offset requirements --
- PRESIDING MEMBER LAURIE: How do we --
- 14 COMMISSIONER PERNELL: One -- one
- 15 second. Maybe we can get it --
- 16 PRESIDING MEMBER LAURIE: There's
- something called a power button.
- 18 (Laughter.)
- 19 MR. NAZEMI: I think we were trying to
- 20 conserve energy, Commissioner, here on --
- 21 I'll go ahead and start. The general
- emission offset requirements applies to new,
- 23 modified or relocated facilities. And they rely
- 24 on several principles. The Federal Clean Air Act
- 25 requires offsets, the California State Clean Air

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1 Act also requires offsets, and then local
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- 2 districts, such as South Coast, has its own rule
- 3 which in most cases they're referred to as new
- 4 source review regulations, that also addresses the
- 5 offsets requirements.
- 6 PRESIDING MEMBER LAURIE: Are your
- 7 slides available somewhere?
- 8 MR. NAZEMI: They are loaded in your --
- 9 I don't have a -- okay, here we go.
- 10 PRESIDING MEMBER LAURIE: Okay.
- 11 MR. LAYTON: Commissioner Laurie, we do
- 12 have hard copies available, and if they ran out we
- can make some more.
- 14 PRESIDING MEMBER LAURIE: Yeah. Can you
- see if somebody can do that, Matt?
- MR. LAYTON: Yes.
- 17 PRESIDING MEMBER LAURIE: Thank you.
- 18 Okay.
- 19 MR. NAZEMI: Okay. So I'll briefly
- touch upon these three different requirements.
- 21 But before doing that, I wanted to give a --
- 22 MR. TOOKER: Mohsen, would it be better
- 23 if you moved over to where Duong is so you can see
- the screen, and --
- MR. NAZEMI: All right.

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Before I talk about the federal, state

and local requirements, I wanted to give you an

overall understanding of what South Coast Air

Basin's attainment status is like.
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We have the only area in the nation that
is designated as extreme non-attainment with
ozone, although Houston has worse air quality than
we do, but on the books, we are the only area
designated as extreme non-attainment.

We're also non-attainment for carbon monoxide and PM10, under both federal and state standards. However, we are attainment for nitrogen dioxide, sulfur oxides, and lead. But I need to put a caveat here that both nitrogen oxide and sulfur oxides are precursors to ozone and PM10, and therefore, under our program, we would still require the emissions to be offset even though they are attainment, in that sense.

There are -- well, it did change a

Under the Federal Clean Air Act, the

offset requirements applies to major sources. And

in the South Coast Air Quality Management

District, we have three air basins that actually

is covered under our jurisdiction. The most

minute ago. Okay.

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1 significant one that I'll just focus on is the
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- South Coast Air Basin, under which the designation
- 3 or definition of a major source is the ten tons
- 4 per year potential to emit thresholds for both
- 5 organics and nitrogen oxide, and that's the lowest
- 6 threshold anywhere in the country, in terms of
- 7 applicability of federal offsets requirement.
- 8 On the Salton Sea Air Basin and Mojave
- 9 Desert, because of the attainment definition or
- designation being different, the definition of
- 11 major sources changes. So the offset requirements
- from the federal standpoint changes for those.
- 13 Under the Federal Clean Air Act,
- however, the non-attainment, extreme non-
- 15 attainment area offset requirements are a ratio of
- 1.5 to 1. In other words, for every pound of
- 17 emissions there needs to be a pound and a half of
- 18 offsets provided in order to provide the benefit
- 19 for sources that are being permitted, in terms of
- 20 net air quality benefit.
- MR. TOOKER: Mohsen, if that's not
- 22 working reliably, maybe you could just ask Sandy
- and she'll advance it to the next slide.
- 24 MR. NAZEMI: That would be great. Thank
- 25 you.

1	Under the state Clean Air Act
2	requirements, the definition of major source sort
3	of disappears. It applies to any source that adds
4	an emission increase that is required to
5	demonstrate what's known as a no net emission
6	increase in the basin.
7	And the ratio of no net emission
8	increase is generally speaking a one to one ratio.
9	As a result of the definition of any emission
10	increase, what we have under our South Coast
11	program, we have requirements for all sources,
12	regardless of their size, to have to demonstrate
13	compliance with the offsets requirement.
14	If I can have the next slide. Oops, now
15	you go back once.
16	Under the South Coast new source review
17	program, there are several elements, and I'm not
18	going to focus my discussion on those, but there
19	are BACT, or best available control technology,
20	and LAER, or lowest achievable emission rate
21	requirements. There's also modeling demonstration
22	requirements. But specifically to the topic of
2.3	this discussion, there's offsets requirements that

24 applies to all sources, with the exception of the

sources that are exempted specifically from

- 1 offsets requirements.
- 2 The ratio that is required under our
- 3 rules is a 1.2 to 1. And the facilities that are
- 4 in South Coast are divided into basically two
- 5 groups, one that are facilities, or 380 of those
- 6 that are in the RECLAIM Program, and then the
- 7 rest, 28,000 plus that are not in the RECLAIM
- 8 Program.
- 9 Under the RECLAIM Program, the emissions
- 10 offsets are known as RTCs, or RECLAIM Trading
- 11 Credits, whereas in the non-RECLAIM Program,
- 12 they're referred as to ERCs, or Emission Reduction
- 13 Credits.
- 14 As part of our new source review rules,
- 15 there are sources that have less than four tons
- 16 per year emission that are exempt from offsets
- 17 requirements. When I say that, that means that
- 18 the source itself is not responsible to provide
- 19 the offset, but our district provides the amount
- 20 of offsets or emission increases associated with
- 21 those sources on an annual basis, and we have to
- 22 make that demonstration to both Air Resources
- Board and EPA.
- There are also other sources such as
- 25 essential public services that have access to a

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1 bank of credits that we refer to as priority
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- 2 reserve, and therefore those sources do not have
- 3 to provide offsets. And there are also other
- 4 provisions in our rule that allows for projects
- 5 that are subject to regulatory compliance, and a
- 6 good example is the reformulated gasoline that is
- 7 mandated under federal and state. Those sources
- 8 would also not have to provide the offsets
- 9 directly, and the district will provide those
- offsets on an annual equivalency basis.
- MS. TOWNSEND-SMITH: Can I ask you a
- 12 quick question.
- MR. NAZEMI: Sure.
- MS. TOWNSEND-SMITH: On the priority
- reserve, what did you say the businesses were, and
- 16 does that include construction, or -- or does it
- 17 also include like backup generators and things
- 18 like that?
- 19 MR. NAZEMI: The priority reserve mainly
- 20 applies to what we call essential public services,
- 21 and those are generally like sewage treatment
- 22 plants and landfills, and things of that sort.
- The exemptions that I mentioned that are in the
- rule, I only mentioned the four tons per year
- 25 exemptions, there are several other exemptions,

1 and the emergency backup generators are one of

- 2 those that are exempted from having to provide
- 3 offsets, provided they operate 200 hours or less
- 4 per year.
- 5 MS. TOWNSEND-SMITH: Thank you.
- 6 MR. NAZEMI: The ERCs that are utilized
- 7 are created in a number of different ways, and I'm
- 8 not going to spend too much time on that. Maybe
- 9 this would be a subject of the afternoon
- 10 discussion. But they're either created through
- shutdown of equipment or controlling the equipment
- over and beyond what is already required under the
- 13 rules.
- 14 There is also a possibility of looking
- at non-stationary source ERCs, such as area source
- 16 and mobile sources. And the last thing I'll
- 17 mention quickly is that in the -- in terms of
- 18 issuance of emission reduction credit, at the time
- 19 of issuance our district, under our new source
- 20 review requirement, discounts the ERCs to BACT
- 21 levels, and that's a little different than what
- the federal requirement is, which is RACT
- adjustment, or reasonable achievable available
- 24 control. We go down to best available control.
- 25 And that's part of the overall agreement that we

1 had with EPA to allow us to use a 1.2 to 1 offset

- 2 ratio, instead of the 1.5 to 1 for major sources.
- 3 Quickly, on the inter-pollutant trading,
- 4 that's really an issue that deals with precursors.
- 5 And the concept is that if you can reduce
- 6 emissions for -- from a precursor to another
- 7 pollutant and there are only two secondary
- 8 pollutants, ozone and PM10, then you could get the
- 9 same benefit to the extent that they would reduce
- or not form the secondary pollutant.
- 11 The inter-district trading, the question
- was brought up earlier, if it's within the same
- 13 basin there are certain allowances that -- that
- 14 allows the transfer of credits within -- between
- 15 the districts. If they're in different air basins
- 16 -- I think Commissioner Pernell, you asked about
- 17 that -- it has to be in a way that the source of
- 18 ERC, that is, the generated ERCs have to be in an
- 19 upwind area to the -- to the location where the
- emission credits are going to be used.
- 21 Also, where the emissions are generated,
- 22 the credits are generated, has to be in a worse
- 23 air quality attainment status compared to the
- 24 basin where the emissions credits are going to be
- 25 used. And the -- the air quality in that downwind

1 area has to be overwhelmingly impacted by the

- 2 upwind area.
- 3 If all those conditions are there, and
- 4 both governing boards of the two districts pass a
- 5 resolution to make that happen, then inter-
- 6 district transfers could occur. But other than
- 7 that, they're not legally allowed.
- 8 COMMISSIONER PERNELL; So both districts
- 9 or basins have to approve the application, or
- 10 request.
- 11 MR. NAZEMI: That's correct. Both the
- 12 -- the transferring and receiving districts have
- to approve that.
- May I have the next slide, please.
- 15 COMMISSIONER PERNELL: The next slide,
- 16 please.
- 17 MR. NAZEMI: This is a quick look at a
- question that was asked by Commissioner Laurie
- 19 earlier, about the availability of offsets. This
- 20 doesn't show a map, but it shows in South Coast
- 21 how many pounds per day of ERCs are available, and
- the amounts that are shown there in the first
- column shows what's left.
- 24 The second column shows the amounts that
- 25 were recently purchased by a number of power

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plants that are undergoing permitting in South
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 2
         Coast Air District. And as you can see, of the
         total, for example, of hydrocarbon emissions,
 3
         about 5,000 of the remaining 20,000 was purchased
         by power plants, and there was another 3700 pounds
         that was transferred to other districts for
         permitting of new power plants. Specifically,
         those were all transferred to Mojave Desert Air
 8
 9
         Basin under the inter-district transfer for
         permitting of the High Desert and Blythe projects.
10
11
                   I think of particular interest here is
         the availability of PM10 emissions credits. As
12
         you can see, the remaining bank of credits is
13
14
         about 1100, and recently 960 pounds were purchased
         for permitting of power plants. What that really
15
16
         tells us is that there's not enough PM10 credits
17
         to permit the power plants that are proposed in
         South Coast, and certainly with the advent of the
18
         shortage of credits, our board has now been more
19
         sensitive to agreeing to transfer credits outside
20
2.1
         the district for other districts to permit those.
                   If we can go to the --
22
                   COMMISSIONER PERNELL: Is there -- I'm
23
         sorry. Is there an effort by your board to seek
24
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credits that are outside your district? Rather

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1 than -- I understand about not transferring them
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- 2 out, but is there a -- a movement to transfer some
- 3 in?
- 4 MR. NAZEMI: Unfortunately, under state
- 5 law we cannot transfer any credits into the
- 6 district, because we are in a worse non-attainment
- 7 area than anywhere else, and therefore, we cannot
- 8 bring credits into the district. We are only the
- 9 exporter of credits.
- 10 COMMISSIONER PERNELL: I see.
- 11 MR. NAZEMI: May I have the next slide,
- please. I think if you go back one -- I'm sorry.
- This is a quick snapshot of what
- happened to the price of emission reduction
- 15 credits, or ERCs, in the last five years. As you
- 16 can see, the price of reactive organic gases or
- 17 hydrocarbons has almost doubled from a year ago.
- 18 The same thing with nitrogen oxides. And the
- 19 reason that nitrogen oxide hasn't gone up
- 20 significantly is because the majority of users of
- 21 nitrogen oxide credits are in the RECLAIM market,
- and they don't deal with ERCs, they deal with
- 23 RTCs.
- 24 Sulfur oxides and CO have not increased
- 25 significantly, and I think you can attribute that

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to maybe inflation and other things, but you can
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- 2 see that PM10 credits from a year ago, or two
- 3 years ago, they have quadrupled, and the problem
- 4 is now that they are not available and they're
- 5 very scarce. So the price is not an issue, it's
- 6 --- it's not available. The availability is the
- 7 big issue.
- 8 May I have the next slide, please.
- 9 PRESIDING MEMBER LAURIE: The RECLAIM
- 10 Program is important. It's my fault that we've
- 11 gotten so far behind, and I apologize for that.
- But let's see if we can summarize, Mohsen, in
- about five minutes or so, if you can.
- MR. NAZEMI: Okay. In fact, I probably
- don't need that much.
- 16 The RECLAIM Program presently requires
- the new power plants to provide RTCs for their
- 18 first year of operation. So if a power plant is
- 19 coming online on the year 2003, in order to get a
- 20 permit they need to just demonstrate that they
- 21 have adequate RTCs for the first year of
- operation, under our rules.
- We are, however, are you are well aware,
- 24 undergoing some proposed changes to the RECLAIM
- Program, and these changes will be brought to our

temporary basis.

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governing board for approval in the early part of

May of 2001, and some of the issues that we are

right now debating are whether or not the new

power plants should stay in the existing RECLAIM,

or be put in the bifurcated universe that is being

generated for the existing power plants, on a

Also, the other question that we are dealing with is should the new power plants supply RTCs, or can they provide mitigation fees into a air quality investment program where the district will then go out and find offsets to supply the needed credits for the power plants to be able to provide the offsets.

And, finally, I will just quickly run through the last three slides, if you'd like to have a sense of why there is an issue with the RECLAIM amended changes. This shows that the emissions and allocation, actual emissions and allocation in the RECLAIM Program cross over in 1999, but if you go to the next slide you can see that for the utilities, that crossover actually occurred in 1998, and since that time the emissions in '99 were one and a half times of overall power plant allocations, and in the year

1 2000 they were -- actual emissions were more than

- 2 twice of the amount of initial allocation. And we
- 3 will probably see a lot worse picture in 2001,
- 4 because even in the first quarter they're -- they
- 5 have already exceeded the initial allocations.
- And as a result, the last slide will
- 7 show you what happened to the price of the credits
- 8 in the RECLAIM Program, and the average price of
- 9 credits in '99 for a year 2000 RTC was two and a
- half times of what it was back in the '98-'97
- 11 timeframe. But the year 2000, those prices went
- up by a factor of tenfold, and as a result we are
- 13 moving forward with the recommended changes to
- make sure that not only there are available
- 15 offsets, but the RTC prices are stabilized for the
- 16 remaining RECLAIM facilities.
- 17 And then, finally, what we are doing is
- 18 working in tandem with the Energy Commission, CEC
- and other CAPCOA members, as well as the EPA, to
- 20 make sure we implement both the AB 970 and
- 21 appropriate executive orders that were issued by
- the governor.
- Thank you.
- 24 PRESIDING MEMBER LAURIE: Thank you,
- 25 sir.

1 Before we get to our next speaker, let

- 2 me just note, Mr. Cohn, of SMUD, we will get to
- 3 you before noon, so hang on.
- 4 Mr. Layton.
- 5 MR. LAYTON: Commissioner Laurie, I'd
- 6 like to introduce Steve Moore, from the San Diego
- 7 Air District.
- 8 PRESIDING MEMBER LAURIE: Mr. Moore,
- 9 good morning.
- MR. MOORE: Good morning.
- PRESIDING MEMBER LAURIE: We also have
- hard copies of Mr. Moore's presentation.
- 13 MR. LAYTON: We do. There are more
- copies available. Would you like me to give you a
- 15 copy, as well?
- 16 PRESIDING MEMBER LAURIE: Yeah. We --
- 17 we have them. I guess that was not intended as a
- 18 question.
- 19 MR. MOORE: Thank you. I'm going to
- 20 give a brief overview of the offset situation in
- 21 San Diego County. The San Diego Air Pollution
- 22 Control District basically consists of San Diego
- 23 County.
- 24 At this time we do not require any state
- 25 offsets. I say at this time because the reason we

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2
        3319, we made the necessary demonstrations so that
3
       we were relieved of that responsibility. However,
        as part of that program we have to make an annual
        demonstration that there'll be no net increase of
        emissions in San Diego County, and because of the
        new peaker units that are being sited there --
        eight, at the last count -- we have some concerns
8
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don't require state offsets is because, under AB

- 9 that we may not be able to make that demonstration
- 10 in the future, in which case we would be requiring
- 11 state offsets for NOx and VOC, because we are a
- non-attainment area for the state standards for 12
- 13 ozone.

- PRESIDING MEMBER LAURIE: And at what 14
- point do you make a determination? Is it just the 15
- next poor guy that's stuck in line, or do you 16
- 17 watch along the way and -- and anticipate and
- 18 forecast? So is it a question of unlucky timing
- who gets caught? 19
- MR. MOORE: Pretty much. We can't make 20
- 21 our demonstration to the Air Resources Board.
- We'd be required to provide state offsets if we 22
- start at 15 tons. 23
- As far as the other criteria pollutants 2.4
- 2.5 go, we're in attainment of the CO and SO2

5.0

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1 standards. We've not required any offsets for
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- them. We do not attain the PM10 standard, the
- 3 state standard. However, the Health and Safety
- 4 Code does not require PM10 offsets, and we do not
- 5 require any in San Diego County.
- 6 There is a provision in our rules that
- 7 they can be provided to offset or mitigate impacts
- 8 on local air quality, but it's not a requirement
- 9 in the rules. It's an option, basically.
- 10 However, we do require federal offsets.
- 11 We are a serious non-attainment area for the
- 12 national air quality standard for ozone. So we
- 13 require NOx and VOC offsets for sources that are
- larger than 50 tons per year. There's additional
- 15 emission offsets require the ratio of 1.2 to 1.
- 16 This is just to give you an idea of the
- 17 amount of offsets that are required. This is the
- 18 proposed Otay Mesa Generating Project. It's two
- 19 natural gas turbines, combined cycle turbines,
- 20 with two ppm NOx at 15 percent oxygen, which is
- 21 pretty much state of the art for SCR control, at
- least that. They're hoping to do better with
- 23 SCONOx. Five hundred and ten megawatts, and as a
- result, they're going to generate about 100 tons
- 25 per year of emissions. That's what they've taken

as a permit limit. As a result, they require 120

- tons per year of offsets.
- 3 The current ERCs that are available in
- 4 the bank are 122 tons of NOx and 224 tons of VOCs.
- 5 That works out to be about 234 tons of NOx
- 6 equivalent. We allow a two to one conversion of
- 7 VOC credits into NOx credits. That also may
- 8 change in the future. EPA has objected to our new
- 9 source review rules on that basis. However, they
- 10 said at the time, for the present time, we can go
- 11 ahead and use that -- that conversion ratio.
- 12 Of those 234 tons, about 50 tons have
- 13 been optioned to PG&E as part of the Otay Mesa
- 14 Generating Project. In addition, I put available
- 15 there in quotes because, of those 180 tons, most
- 16 of them are not for sale. Sources in the county
- 17 want to hold on to those credits. They have
- 18 projects of their own in the future that they may
- 19 want to use them for, so it's very hard to buy
- 20 credits.
- In addition, there's the EPA RACT
- 22 adjustment issue that was mentioned previously.
- 23 It's not clear right now how much those credits
- 24 will be worth when they are actually used. We
- don't agree with that policy. We adjust the

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credits when they're created, but as a practical
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- 2 matter, for a major source that's going to go
- 3 through new federal new source review, they're
- 4 going to have to be RACT adjusted at time of use.
- 5 PRESIDING MEMBER LAURIE: If the
- 6 district has the authority to approve an offset
- 7 package, and my understanding is that that is your
- 8 jurisdiction, is -- is that correct?
- 9 MR. MOORE: Yes.
- 10 PRESIDING MEMBER LAURIE: So a developer
- goes -- a buyer goes to a seller, as an example,
- 12 and arranges -- or a series of sellers, and
- 13 arranged for the transfer of a certain number of
- 14 credits, then they have to come to you to sign off
- on that. Is -- is that correct?
- 16 MR. MOORE: We have to have approved the
- 17 credits. They have to be in our bank.
- 18 PRESIDING MEMBER LAURIE: Yeah. Okay.
- 19 But then do you have discretion whether or not --
- 20 assuming you have X number of units in the bank,
- 21 and the developer brings to you X minus Y
- 22 requests, and so you have sufficient quantities in
- the bank. What discretion do you have to not
- 24 approve that -- those transfers?
- MR. MOORE: I can't think of any

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1 transfer that we have not approved, basically.
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- 2 Credits are recorded individually. It's not a
- 3 bank like that we have an account of 180 tons of
- 4 credits. Each credit is an individual item. And
- 5 so the developer purchases those credits for --
- from whoever owns them.
- 7 PRESIDING MEMBER LAURIE: Well, can a
- 8 local district -- strike that.
- 9 Can -- can the City of San Diego come to
- 10 you and say well, we understand that the amount of
- 11 credits total in your district is X. And let's
- 12 assume it's somewhat limited. And, you know,
- we're really trying to get in the series of
- 14 business parks that's going to require their own
- 15 credits, and we're going to ask you limit the
- 16 transfer in one direction so that they're
- 17 available for a different kind of use, other than
- a power plant, for example.
- 19 Is that something you'd consider? That
- is, do you look at local land use requirements and
- 21 determine what regional land use needs are and try
- 22 to make decisions accordingly, or don't you get
- into that?
- MR. MOORE: We don't get into that, and
- 25 honestly I don't think we have the authority under

- 1 our rules to do that.
- 2 PRESIDING MEMBER LAURIE: Okay. Thank
- 3 you.
- 4 MR. MOORE: I think I'll arrange my
- 5 slide show a little differently next time.
- I put this slide in basically just to
- 7 show why it's hard to create credits from existing
- 8 sources. The credits have to be surplus from the
- 9 existing rules and regulations, and an
- 10 uncontrolled turbine, 1970 vintage, was about 225
- 11 ppms of -- ppm of NOx in the exhaust. In 1973,
- our Rule 68 dropped it to 42 ppm, and in 1997 our
- 13 BARCT rule, which is best available retrofit
- 14 control technology, which is a state requirement,
- 15 dropped it to somewhere between 9 and 15 ppm.
- 16 And so any emission reductions have to
- 17 be on top of this, and so already 90 to 95 percent
- 18 of the emission reductions that can be obtained
- 19 from a turbine, that is under our rules and
- 20 regulations, have been basically preempted by the
- 21 regulations.
- 22 There are some additional potential NOx
- 23 ERC sources. These are sources from -- stationary
- 24 sources that have been investigated in San Diego
- 25 County. Overcontrolled existing sources. The

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1 existing power plants, they could be credit
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- 2 sources, but unless the -- they're repowered
- 3 onsite, they would have to be shut down or their
- 4 operations restricted in order to generate
- 5 credits. We're exploring ways to try and -- ways
- to get around that, but right now that would be
- 7 the situation.
- 8 Exempt equipment has been looked at.
- 9 For example, turbines less than one megawatt, pre
- 10 1994, are exempt from our rules and regulations.
- 11 And so are boilers less than five million Btus per
- hour. PG&E went around and did a pretty thorough
- job of trying to find additional NOx sources from
- 14 stationary -- NOx credits from stationary sources,
- 15 and actually did not come up with very much.
- 16 There is some potential for the turbines and
- 17 boilers. The boilers generally don't generate
- much emission, so the potential is small.
- 19 There aren't very many turbines around,
- and additionally there's the complication of
- 21 trying to quantify reductions. Because they're
- exempt, oftentimes they don't have the records
- 23 necessary to try and quantify what their previous
- emissions were.
- 25 In addition, we have a MERC program that

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1 was developed in conjunction with the Otay
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- 2 Generating Project, that is going forward and is
- 3 the source of credits which will probably be used
- for that project. We had a previous MERC program
- 5 that was actually approved also, that was for
- 6 repowering fishing boats. However, that program
- 7 pretty much hasn't gone forward because of the
- 8 restrictions that eventually were incorporated in
- 9 the program made it economically not viable.
- 10 As far as some of the other -- well,
- 11 this is sort of the punch line, but as a result of
- 12 the scarcity of NOx offsets in San Diego County,
- 13 sort of similar to South Coast, the prices have
- 14 escalated rapidly. You can see from '94 to 2000
- 15 it went from \$14,000 to \$70,000 a ton. This is
- for credits from stationary sources. The MERC
- 17 credits are significantly more expensive than
- 18 this.
- 19 PRESIDING MEMBER LAURIE: Thank you,
- sir, very much.
- Mr. Layton.
- 22 MR. LAYTON: Thank you. Can you hear
- 23 me?
- 24 PRESIDING MEMBER LAURIE: Yes.
- 25 MR. LAYTON: I would like to introduce

5.7

- 1 Mr. Neal Pospisil from Calpine.
- 2 MR. POSPISIL: Good morning.
- 3 PRESIDING MEMBER LAURIE: Good morning,
- 4 sir.
- 5 MR. POSPISIL: On short notice I'm here,
- 6 and therefore would like very much to have this
- 7 interactive discussion, and when you have
- 8 questions please interrupt while I'm speaking
- 9 about the experience that Calpine has.
- 10 As you're aware, we have three projects
- 11 currently under construction, two which are going
- to come online this summer. The ones that are
- 13 coming online are the Los Medanos Energy Center
- 14 and the Sutter Power Project. And the other one
- 15 that's in construction is the Delta Energy Center.
- 16 All three of these --
- 17 PRESIDING MEMBER LAURIE: Can everybody
- 18 hear okay?
- 19 No.
- MR. POSPISIL: Oh, I'm sorry.
- 21 PRESIDING MEMBER LAURIE: There you go.
- 22 MR. POSPISIL: Okay. As the panel is
- 23 aware, Calpine Corporation has three projects
- 24 currently under construction in California, the
- 25 Los Medanos Energy Center, the Sutter Power

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Project, and the Delta Energy Center. All three
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 2
         of these projects did require emission reduction
         credits. Therefore, we have been evaluating the
 3
         marketplace throughout California in all the air
         districts for several years, and have been very
         proactive in putting a tremendous amount of effort
         forth in the early stages of our project planning
         in evaluating whether or not these are available
 9
         for the proposed projects, and have been procuring
10
         these on a as project basis.
11
                   In regards to your siting process, when
12
         we submit an application we have to put a
         reasonable package forward at the very initial
13
         stage of the siting process, and therefore advance
14
         planning and certainty are key. The advance
15
         planning is on our shoulders. However, the
16
17
         certainty is within the hands of the agencies.
         And when I say certainty, I'm basing that on the
18
         potential the inter-pollutant trades that we
19
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propose and also the CEC mitigation that is beyond
the agency requirements that we may have to put

forth later on in the process, and therefore puts

a bit of, you know, uncertainty into the package.

Thus far, working within the Bay Area,

25 we have been very successful with the inter-

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1 pollutant trades that we have proposed. But in
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- other cases, you know, we have been three-quarters
- of the way in the permitting process and have run
- 4 into a bit of uncertainty, where the CEC does have
- 5 the discretion for mitigation. And therefore,
- 6 we're required to mitigate with emission reduction
- 7 credits on sources that are, for instance, exempt
- 8 from the state agency, and therefore taking
- 9 emission reduction credits out of a pool that can
- 10 be used under general regulatory requirements
- 11 within the air district.
- 12 PRESIDING MEMBER LAURIE: Okay. Let me
- --let me stop you right there. Mr. Tooker, can
- 14 you, or Mr. Layton, in one sentence, explain the
- 15 nature of CEC mitigation in excess, or in addition
- to local district mitigation.
- 17 MR. TOOKER: Yes. When the Energy --
- 18 the Energy Commission, as lead agency in the
- 19 licensing process, is responsible for addressing
- 20 CEQA issues, and when Staff carries out its
- 21 independent analysis it identifies any potential
- 22 impacts that it believes are significant in air
- 23 quality and a number of other areas. And --
- sorry.
- 25 When Staff carries out its independent

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analysis to address CEQA issues and make
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 2
         recommendations to the Commission on a licensing
 3
         case, we identify those areas in which we think
         there may be significant impacts, including areas
         of air quality, taking into consideration project
         specific and locational aspects and potential
         impacts on public health, notwithstanding
         regulatory requirements.
 8
 9
                   And where we believe that there is
10
         sufficient evidence to demonstrate the potential
11
         for a significant impact, we would recommend a
         mitigation be provided.
12
                   PRESIDING MEMBER LAURIE: In what
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13 PRESIDING MEMBER LAURIE: In what

14 percentage of our cases do we require, or does

15 Staff propose mitigation in excess of local

16 district requirements? Some, all, most?

17 MR. TOOKER: I don't have an exact --

exact answer. I would probably say most.

PRESIDING MEMBER LAURIE: Okay.

18

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MR. TOOKER: In those areas where there are not mitigation requirements for specific pollutants by -- by local districts, and there are increases in those pollutants that contribute to existing violations. Most normally it pertains to particulate matter, because although particulate

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1 matter emissions may result in -- or there may be
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- 2 existing violations of state PM10 standards,
- 3 there's not a regulatory requirement under state
- 4 law for them to -- for an applicant to provide
- 5 offsets for those.
- 6 PRESIDING MEMBER LAURIE: Okay. That
- 7 helps. Thank you.
- 8 Mr. Pospisil.
- 9 MR. POSPISIL: Yeah. In general, you
- 10 know, what have we learned from our development
- in, you know, the past several years. In general,
- 12 there's a PM10 state shortage. And what would be
- 13 helpful, I believe, for the developers would be
- 14 flexibility in creation of PM10 ERCs. Also,
- 15 certainty as up front as possible with proposed
- 16 inter-pollutant trades. And I believe it may be a
- 17 good idea, rather than a requirement for the
- 18 applicant to use ERCs that are within an air basin
- 19 under the -- an APCD, to potentially, as in the
- 20 case of I believe it was the Otay Mesa project, to
- 21 provide some ERCs, plus some mitigation fee.
- 22 Therefore, leaving more ERCs in the pool of the
- 23 air district so the development of power projects
- 24 can be more easily done.
- 25 PRESIDING MEMBER LAURIE: When you do

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1 your initial site inspections and you look for
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- 2 necessary ingredients, potential for gas supply,
- 3 potential for transmission connections, is it fair
- 4 to say that ERC availability is one of the factors
- 5 that you examine before you determine to invest in
- 6 a given site?
- 7 MR. POSPISIL: Yeah, absolutely. It's a
- 8 very critical component in the siting evaluation.
- 9 PRESIDING MEMBER LAURIE: Is it your
- 10 sense that most developers have maps on the wall,
- or the equivalent, of where ERCs are available
- 12 statewide?
- 13 MR. POSPISIL: I'll make the statement
- 14 that prudent developers absolutely have to have
- these maps on the walls.
- 16 PRESIDING MEMBER LAURIE: And that, of
- 17 course, includes your -- your employer.
- MR. POSPISIL: Yes.
- 19 PRESIDING MEMBER LAURIE: In looking at
- that map that you presumably have on your wall,
- 21 and you eliminate all charts but ERC availability
- 22 charts, and so you have one map on the wall and
- 23 you go -- and you look at the state of California,
- and you determine that certain given areas have in
- 25 most likelihood the greatest availability of

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offsets, sufficient for your project. In looking
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 2
         at that map, is that equivalent to where the load
         is -- is, and where new power plants are required,
 3
         or is there a lack of synchronization there?
                   MR. POSPISIL: Well, it's an interesting
         question, because when -- if you were to take a
         look, you know, at California on a statewide
         basis, you know, where the load is is usually
 8
 9
         where the air quality is potentially in a non-
10
         attainment situation because you have more sources
11
         of pollution, and therefore that's where the ERC
         is required. So as a result, to permit a power
12
         plant close to the load center, then you are more
13
14
         than likely required to have to obtain ERCs rather
         than building a power plant in an area where there
15
16
         isn't much development that's attainment --
17
                   PRESIDING MEMBER LAURIE: And can you
         explain what advantage, if any, there is to
18
         building a plant where the load is?
19
                   MR. POSPISIL: In siting a power plant
20
2.1
         closer to where the load is, if you have your gas
         line and your transmission close, the electricity
22
         does not have to flow as great a distance, and --
23
2.4
         or transmission lines do not need to be upgraded,
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2.5

et cetera.

1 PRESIDING MEMBER LAURIE: And does that

- 2 affect efficiency issues at all, to your
- 3 knowledge? Do you know?
- 4 MR. POSPISIL: You're actually talking
- 5 about a topic that is out of my area of expertise.
- 6 PRESIDING MEMBER LAURIE: Okay. Thank
- 7 you. Thank you, sir.
- MR. POSPISIL: You're welcome.
- 9 PRESIDING MEMBER LAURIE: Anything
- 10 further at this time?
- MR. POSPISIL: No, that's it, in
- 12 summary.
- 13 PRESIDING MEMBER LAURIE: Thank you very
- 14 much.
- 15 Commissioner Pernell, did you have any
- 16 questions?
- 17 COMMISSIONER PERNELL: Well, yes, I do
- have a question. Perhaps more than one.
- 19 You mentioned for generators, as it
- 20 relates to PM10, that flexibility would be
- 21 preferred, in terms of offsets. And just a brief
- 22 example of -- of -- I think I heard that you said
- we can perhaps get half of them and then pay a
- 24 mitigation fee. Is that an example of the
- flexibility you're talking about?

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MR. POSPISIL: Well, yeah. There's

actually two aspects. When PM10 is required as an

emission reduction credit on a -- from the

regulatory agency, you know, we have to plan ahead

of time and look at the potential possibility of

using creation as a methodology to get through the

permitting process, and to keep the air quality

reasonable in that area we also have to look at

inter-pollutant trades.
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10 But as we're permitting our project 11 through the process, that's where we could potentially have to provide mitigation to the 12 California Energy Commission. And if so, what I 13 did state was that, in the example of the Otay 14 Mesa Generating Project, that I believe that they 15 16 offset some of their PM10 and the -- but not all 17 the way up to the amount that they were emitting, 18 and therefore paid a mitigation fee for that difference. 19

- 20 And so I see that as a reasonable 21 alternative with CEC mitigation.
- 22 COMMISSIONER PERNELL: And you guys have
 23 never -- Calpine has never had the occasion or
 24 opportunity to do that?
- 25 MR. POSPISIL: We have not, as a matter

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of fact. In one of our projects right now that's
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 2
         going through the licensing process, we have
         worked with the California Energy Commission, and
 3
         we have had to provide almost traditional ERC
         mitigation. In other words, we're using ERCs that
         would've been exempt from a certain air pollution
         control district, but now we're taking them out of
         that pool and we're putting them forth in our
 9
         package to permit one of our projects.
10
                   COMMISSIONER PERNELL: Okay.
11
                   PRESIDING MEMBER LAURIE: At what point
         in time in our process do you know that Staff is
12
         recommending or requesting additional mitigation?
13
                   MR. POSPISIL: My experience with CEC
14
         mitigation is only in one project, and I would say
15
16
         about halfway through to the three-quarter mark,
17
         through the process. Is that correct, Chris?
18
                   MR. TOOKER: The first point at which it
         -- the first opportunity we have would be at our
19
         issue identification statement. If it was not
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         identified at that point, and it should be, then
         it would be identified in the Preliminary Staff
2.2
         Assessment. I don't believe that there should be
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any normal circumstances in which it would not be

identified until the Final Staff Assessment.

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1 Those -- those kinds of issues should be
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- 2 identified early on and put on the table to inform
- 3 the Committee and the Applicant, and others.
- 4 COMMISSIONER PERNELL: Are we talking
- 5 about a 12, 6, 4, or 21 days?
- 6 MR. TOOKER: I was talking about a
- 7 typical 12 month process. But the milestones
- 8 would be similar, but different timing in the six
- 9 and the four month process.
- 10 One of the things that I wanted to bring
- 11 up, which is present in the four month process
- 12 that may be able to address some of the
- 13 flexibility that Neal is talking about, is under
- AB 970, the four month process defined in that
- 15 bill required that if applicants were not able to
- 16 provide sufficient offsets that they could provide
- 17 money into a mitigation bank. And I was going to
- 18 impose on perhaps Mr. Nazemi or Mr. Moore to say
- 19 how, if they were going to be responding in that
- 20 kind of a process, as an air district, how such a
- 21 mitigation bank would work where they receive
- 22 payment and then provide offsets.
- Mr. Nazemi, are you familiar with that
- 24 requirement?
- 25 MR. NAZEMI: I'm familiar with that.

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1 However, we haven't crossed that, but we have used
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- 2 a similar approach in some of our settlement
- 3 agreements and orders of abatement, where the
- 4 mitigation fee has been put into programs such as
- 5 Carl Moyer, where we would provide supplemental
- 6 offsets in lieu of having the source to go out and
- 7 get it. And that's part of what we are looking at
- 8 under the RECLAIM amended changes.
- 9 MR. TOOKER: The thing I'm not aware of
- 10 is how EPA would look at that for new stationary
- sources having offsets provided -- if you're
- assuming that they're not CEC mitigation, but if
- they're standard regulatory offsets. Duong, are
- 14 you aware of how EPA would look at that process of
- providing funding into a mitigation bank?
- 16 MR. NGUYEN: As far as I'm aware we have
- not discussed that possibility yet.
- MR. MOORE: Steve Moore, San Diego. As
- 19 far as I can recall, for the Otay Mesa project we
- 20 -- the fees are going to be rolled into our Carl
- 21 Moyer money. And there is some provision for, I
- guess, local offsets. Groups in the area have
- first right of refusal on some of that money.
- But, you know, there is no standard policy. These
- things have been done on a case by case basis in

- 1 other situations.
- 2 PRESIDING MEMBER LAURIE: Okay. Thank
- 3 you.
- 4 Chris, before we go on, let me take this
- 5 opportunity to call on Mr. Cohn, representative of
- 6 SMUD, who needs to leave.
- Good morning, sir.
- MR. COHN: Thank you very much,
- 9 Commissioner Laurie and Commissioner Pernell.
- 10 Always a pleasure to be here, and see our former
- 11 SMUD director here at the Energy Commission.
- 12 COMMISSIONER PERNELL: That's not going
- to get you offsets.
- 14 (Laughter.)
- MR. COHN: I tried. All right.
- 16 As you know, Sacramento is one of the
- 17 most rapidly growing regions actually in the whole
- 18 country, let alone in California. And, of course,
- in our territory, which is mainly Sacramento
- 20 County, we've seen our load increasing as the
- 21 population increases, and we have resources for
- about half our load. And we have tried to have a
- very balanced program that doesn't rely on any one
- technology. And over the last five years, we've
- installed 500 -- or, actually, a little over 400

1 megawatts of natural gas-fired capacity, and over

- 2 the next few months we'll be adding 44 megawatt
- 3 peaker at Procter and Gamble.
- 4 We also are upgrading, or have upgraded
- 5 the McClellan plant so that that can put out 75
- 6 megawatts on a more frequent basis. And then we
- 7 are negotiating with Enron for up to 45 megawatts
- 8 of wind capacity out in Solano County.
- 9 But perhaps most significantly is what's
- 10 on the horizon, and we are looking to add 500
- 11 megawatts, and possibly even a thousand, at our
- Rancho Seco site, and that would be gas-fired
- 13 capacity. And when we look at what the
- 14 constraints are there, and there are a number of
- 15 constraints we need -- anybody needs to look at
- 16 when building a new plant, but certainly for us in
- 17 the Sacramento region, air offsets are probably
- the biggest problem that we have.
- 19 Sacramento has very few banked offsets
- from stationary sources, and yet 80 percent of the
- 21 pollution in the region comes from mobile sources.
- 22 So that's really an untapped source for offsets.
- 23 And as you may know, I -- I work partly at SMUD
- and partly as a city council member, and serve on
- a lot of regional boards dealing with planning and

1 transportation issues, and I can assure you one of

- the biggest needs in the Sacramento region is for
- 3 help on reducing those mobile emissions and trying
- 4 to reduce traffic congestion at the same time.
- 5 So there's really an opportunity here
- 6 that has not been tapped, and we're hopeful that
- 7 working together with the Energy Commission, the
- 8 EPA, ARB, the -- the air district here, that we
- 9 can try to make mobile sources more than just a
- 10 theoretical possibility, but actually see those
- 11 occur.
- 12 And the local air district has worked,
- for example, recently with our area, Sacramento
- 14 Area Council of Governments, to start a new
- 15 program that's called SECAT, S-E-C-A-T, in which
- 16 clean, or diesel engines in trucks and other heavy
- 17 duty diesel vehicles are either replaced with
- 18 clean engines or whole new vehicles, either
- 19 cleaner diesel or alternative fuel vehicles.
- 20 Certainly, this type of thing would, if
- 21 that were available where an applicant could
- 22 invest or put into a program like that, but also I
- think we need to be a little more imaginative in
- 24 terms of being able to get money directly to
- 25 transit districts which, believe me, can use the

7.2

1 money. They are sorely in need of money. There's

- 2 always demand for service. If service is
- 3 provided, it will be used. But the biggest
- 4 constraint there is lack of money.
- 5 So if you have an applicant that's
- 6 willing -- that has a need to provide power, and a
- 7 need for the resources there to add to transit, it
- 8 seems there ought to be a way for us to figure
- 9 that out. And I know there are a lot of technical
- 10 issues that have to be resolved, but I think it's
- 11 incumbent on us to solve those, because that is
- 12 really the basic public policy problem out there
- and why we cannot add capacity quickly to the
- 14 system. And also, obviously, we could be doing it
- in a way that would solve other societal needs, as
- 16 well.
- 17 I do want to indicate, by the way, that
- we are very thankful to your Staff for helping us
- 19 most recently in getting more flexibility in
- amending our Carson permit. Normally, a process
- 21 like that might have taken well over a year. The
- 22 problem we had was we were limited to the number
- of hours we could operate, particularly at the end
- of a quarter or year, and we had offsets that were
- available. But normally, that process could've

1 taken well over a year, and with the help of your

- 2 Staff, we accomplished that in eight days.
- 3 So I have to say that -- that showed
- 4 that where there is a will, there is a way, and we
- 5 certainly appreciate that because our -- our goal
- is not to lower standards. We -- we definitely
- 7 want to see the air standards stay high in
- 8 California. But we have to be a lot more creative
- 9 in how we apply those and implement those so that
- 10 we can solve the problem of cleaning the air, but
- not in a way that prohibits needed capacity from
- 12 coming in.
- 13 And that's really the message we want to
- 14 deliver today. I'd be happy to answer any
- 15 questions that you may have.
- 16 PRESIDING MEMBER LAURIE: Thank you, Mr.
- 17 Cohn.
- 18 Commissioner Pernell, you didn't
- inappropriately expedite that process, did you?
- 20 (Laughter.)
- 21 COMMISSIONER PERNELL: No, I didn't. I
- had nothing to do with that.
- 23 However, I am intrigued that SMUD will
- 24 be stepping up and looking for innovative ways in
- 25 order to -- to solve one of the problems we have,

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1 not just in northern California but all over the
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- 2 state. So certainly our Staff is willing to work
- 3 with -- with SMUD and any other generator that has
- 4 innovative ways, given all of the necessary
- 5 questions are answered and hurdles are crossed.
- 6 So we thank you for being here.
- 7 MR. COHN: Well, we look forward to
- 8 working with you on that.
- 9 MR. TOOKER: I want to make one point
- 10 regarding SMUD, and that is a number of years ago,
- as Steve remembers, SMUD actually did propose as
- part of one of its power plant proposals a mobile
- 13 offset program, which took a lot of initiative on
- 14 their part, and I believe only withdrew it when it
- 15 reached a point of regulatory failure where we
- 16 couldn't get agreement between the needed
- 17 regulatory agencies to move forward.
- 18 And I would hope that SMUD would be very
- interested in re-initiating such a proposal for
- any big projects they have here.
- MR. COHN: We -- you're absolutely
- 22 right. We wanted to do that five -- actually,
- it's been -- time flies, I think it's actually now
- seven, eight years ago, but when we were in the
- 25 permitting of several of our cogen plants. And we

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1 -- we very -- not only do we want to, I really
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- 2 feel we have to, because there are not the offsets
- 3 available. And -- and that's something we'll
- 4 certainly help you with along with the Sacramento
- 5 Air Quality Management District, to update your
- 6 report, because I notice you didn't show the
- 7 availability of offsets in the Sacramento region.
- 8 But they are very, very limited, so we really feel
- 9 that that's going to be a necessity.
- 10 PRESIDING MEMBER LAURIE: Is Folsom in
- 11 SMUD?
- MR. COHN: Yes, it is.
- 13 PRESIDING MEMBER LAURIE: Your
- discussion really points to a really critical
- issue, and that is tying air emission standards
- 16 and mitigation into other issues. Land use, a
- 17 critical issue. I'd be interested in having an
- 18 understanding of what percentage of vehicular use
- 19 affecting Sacramento's air environment comes from
- down the hill, and comes from Placer County, as
- 21 well, and yet there doesn't appear any mechanism
- to address these issues on a region-wide basis.
- So not only do we have multiple local
- jurisdictions, we have multiple air districts,
- 25 each focusing within its own distinct area. Then

1 we have individual developers whose goal is to

- 2 address their own particular concerns, quite
- 3 appropriately. So the question is, who is looking
- 4 at these issues from a statewide perspective,
- 5 region-wide perspective, because the -- the
- 6 problem is a regional problem. It's not a local
- 7 problem.
- MR. COHN: Absolutely.
- 9 PRESIDING MEMBER LAURIE: Thank you, Mr.
- 10 Cohn, very much.
- MR. COHN: Well, thank you.
- 12 PRESIDING MEMBER LAURIE: Mr. Tooker.
- 13 MR. TOOKER: Yes. If we could go to our
- 14 next speaker, Gail Ruderman-Feuer, from the
- 15 Natural Resources Defense Council.
- 16 PRESIDING MEMBER LAURIE: Welcome,
- ma'am.
- 18 MS. RUDERMAN-FEUER: Thank you. Good
- morning, and I appreciate the opportunity to
- 20 present comments today. I'd like to address three
- 21 points.
- One, just briefly, an issue which we
- haven't discussed yet, which is the role of
- 24 conservation and renewables, and I'll be
- 25 extraordinarily brief, we we'd like to make one point.

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1 Second, the question of whether there
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- 2 really is a significant problem with offsets in
- 3 the state that we need to address. And third, to
- 4 the extent there is a problem, which fixes, in our
- 5 view, work, and which don't.
- 6 And you should have a copy of the
- 7 comments I'd like to make today, and hopefully I
- 8 haven't buried you in too much paper. You also
- 9 should have a copy of our -- a document entitled
- 10 "NRDC Recommendations for Responsible California
- 11 Electricity Policy".
- 12 PRESIDING MEMBER LAURIE: We do not have
- 13 that.
- MS. RUDERMAN-FEUER: You do not. Okay.
- 15 I think --
- 16 PRESIDING MEMBER LAURIE: Can you hold
- one, please.
- MS. RUDERMAN-FEUER: It sounds like
- 19 they're going to get them for you. But they're
- lengthier than you're going to want to read at
- 21 this moment anyway, but there also are some fact
- sheets, what we call our exposing the myths of
- 23 California energy crisis, and these are basically
- 24 to provide you with more detail than what I can --
- 25 PRESIDING MEMBER LAURIE: That's not a

1 political document, by any chance, is it?

- 2 (Laughter.)
- 3 PRESIDING MEMBER LAURIE: Thank you.
- 4 MS. RUDERMAN-FEUER: Well, it's
- 5 addressed -- one of these is address to the
- 6 governor. I'm not sure if that makes it
- 7 political. But -- and also, there's some -- we
- 8 also have a letter dealing with the issue of
- 9 diesel generators, which I know is not the issue
- 10 today but an issue which will come before you at
- some point, in terms of whether they have a role
- in dealing with the energy crisis.
- 13 COMMISSIONER PERNELL: Is that diesel
- 14 backup generation, or just --
- 15 MS. RUDERMAN-FEUER: Correct.
- 16 COMMISSIONER PERNELL: Okay.
- 17 MS. RUDERMAN-FEUER: I mean -- and the
- 18 discussion we have in our letter basically says
- 19 please, whatever you do, do not increase the use
- 20 of diesel generators to meet our power needs or
- 21 we'll end up with a lot of pollution in our
- 22 communities. So, I know that's not the subject
- 23 today, but I do have some background information
- on that issue, as well.
- PRESIDING MEMBER LAURIE: Well, it is.

1 It is the subject today, if not directly,

- 2 certainly indirectly.
- 3 MS. RUDERMAN-FEUER: Okay. Well, I'm
- 4 happy to address that issue. We do have serious
- 5 concerns on that, because diesel exhaust is listed
- 6 both as a cancer causing agent and a toxic air
- 7 contaminant, and --
- 8 PRESIDING MEMBER LAURIE: Bottom line,
- 9 the ultimate question is, is there a conflict
- 10 between additional power supply and clean air. If
- so, what is that conflict, and what are the
- 12 alternatives for addressing that conflict. And
- that's the basis for all of our discussions today.
- 14 MS. RUDERMAN-FEUER: Right. And our
- 15 message to you today, from NRDC and from other
- 16 environmentalists, is we do not think there is a
- 17 conflict. We think we can have both. We can have
- 18 clean air and we can have the power we need for
- 19 our needs.
- The first point, just briefly, is I do
- 21 think renewable energy sources and conservation do
- 22 play a role in the issues you're considering
- today, because the best solution to meeting our
- 24 power needs without compromising the environment
- is to make sure we need more -- less power. So we

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do hope that -- and we know this Commission has
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- 2 had a very valuable focus on energy conservation,
- and we encourage you to keep pushing on that
- 4 issue, because there have been talks about needing
- 5 up to 5,000 megawatts of power for the summer.
- 6 The best way to meet that, or to start meeting
- 7 that need, is through energy conservation. So
- 8 that's an important issue I would just like to
- 9 emphasize.
- 10 COMMISSIONER PERNELL: And I think on
- 11 that issue we are moving forward with conservation
- 12 efforts, both for the short term and long term.
- 13 And as you probably know, we have done a lot in
- 14 that area, so we would agree that conservation is
- one of the elements that we need to address the
- 16 problem.
- 17 MS. RUDERMAN-FEUER: And we appreciate,
- obviously, all the Commission has done on that
- issue, and just encourage you to keep pushing to
- get as much as you can on that issue, because we
- 21 think there are more -- there is more to be gotten
- 22 in terms of both conservation and renewable
- resources.
- The second issue, it sounds like, is the
- issue that's been addressed by most of the

1 speakers today, which is the question do we have a

- 2 shortage of offsets. And I think we have heard
- 3 from some of the air districts that as to some
- 4 pollutants, we do currently have a shortage of
- 5 offsets. That would include, for San Diego
- 6 County, they are short on some of their NOx
- 7 offsets currently.
- 8 In the Los Angeles region in the South
- 9 Coast Air Basin, they may have high prices for NOx
- 10 credits because of some of the problems with
- 11 RECLAIM, but there is not a shortage of NOx
- 12 credits; the shortage is with respect to PM
- 13 credits to the extent there's a shortage.
- 14 Sacramento has said to you that they have some
- 15 concerns about offsets.
- 16 The key point I want to make is there
- 17 are some limited situations where there is a need
- 18 to create more offsets, and I will address how we
- 19 think we should get there. But the point is it is
- 20 not everywhere. And --
- 21 PRESIDING MEMBER LAURIE: As to the
- 22 question of price, do you agree with the statement
- that at some price, a project will not be built,
- and so that is equivalent to no credit
- 25 availability.

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MS. RUDERMAN-FEUER: Yes. I mean, I
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         have no -- it is not our position that if a credit
         -- if a credit costs, you know, $100,000 a ton, or
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         200,000, or some ridiculous amount of money, at
         some point it will not be economical to build that
         project. In the South Coast Air Basin, where I've
         spent a lot of time working on the RECLAIM
         Program, the prices in the year 2000 started to
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         skyrocket. But the reason why they skyrocketed
         was because power plants, since 1993 when the
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11
         RECLAIM Program was adopted, delayed their
         installation of controls.
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                   If you look at -- when you saw Mr.
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         Nazemi's slide and he showed you the levels of
         utility emissions dating back from 1993,
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         everything else has gone down, utility emissions
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         went up. And the reason is that more than half of
         the units at power plants in the South Coast
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         region are uncontrolled. And there's no excuse
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         for that. They should be controlled.
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                   So you have the high price of credits
         because utilities and refineries and a variety of
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         major sources in the region were not controlling,
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         and the allocations of credits were coming down
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         and they finally hit the time where they needed
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1 either to buy credits or control, and everyone

- 2 tried to grab the credits.
- Moving into the future, though, the
- 4 analysis by the South Coast Air Quality Management
- 5 District is that if they put the controls on, put
- 6 the controls on power plants, put the controls on
- 7 refineries, the credit price is going to come down
- 8 dramatically. So that's why we say there is no
- 9 shortage of credits. What we need, and this
- 10 really is the centerpiece of our position, is we
- 11 need to put on cost effective controls. Those
- controls will reduce emissions and will create the
- offsets that we need.
- 14 So the South Coast -- and I'll come back
- 15 to that in a minute. The South Coast Air Basin,
- 16 and Mr. Nazemi can comment on it if he likes, my
- 17 understanding is that there is not and should not
- 18 be a shortage of NOx credits. The PM issue is
- 19 separate, it's not covered by the RECLAIM market.
- 20 The key point I'm trying to make is we
- 21 recognize that the Energy Commission and the
- governor and the Resources Board will have to
- address this offset issue, but we think it would
- 24 be a huge mistake to address that issue in a
- 25 blanket way for California, because there are air

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districts, like San Joaquin, Monterey Bay, the Bay
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- 2 Area, other air districts in the state where there
- 3 is no offset problem. And we're worried that the
- 4 fix may be broader than the band-aid which is
- 5 needed.
- 6 And there are some air quality
- 7 implications from the fixes. So --
- 8 PRESIDING MEMBER LAURIE: So do you --
- 9 do you believe or not believe that regulatory
- 10 mechanisms exist to have projects avail themselves
- of credits that are available, but not in the
- 12 location where a project is being located? So if
- one is trying to do a project in Point A because
- that's where the load is, offsets available in
- 15 C, where you may not want to put a power plant, do
- 16 you believe that the regulatory scheme exists
- 17 where you can effectively transfer those credits
- to make use of them?
- 19 MS. RUDERMAN-FEUER: There's several
- 20 issues raised by your question. One is the issue
- 21 of inter-district trading, and we would agree with
- 22 the EPA policy, and we believe what's mandated by
- the Clean Air Act; you cannot trade credits. If
- 24 you have credits available in the Bay Area and not
- in Los Angeles, you cannot trade between those

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1 regions because there's no pollution impact
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- between them. So to the extent any trading has
- been allowed, it has been where there's an
- 4 upwind/downwind situation with a significant
- 5 impact on one area on the other.
- 6 So I think with respect to two regions,
- 7 there needs to be -- we can't just trade the
- 8 credits to make the numbers work. We have to
- 9 make sure there's an air pollution reason for
- 10 doing the credit trade.
- 11 But I think there's also another issue
- 12 raised by your comments, and I was interested to
- 13 hear the response from Calpine, and I think this
- 14 was one of the issues that was beyond your -- your
- 15 area of expertise. It's not clear to us, if you
- want to provide power to a particular region where
- 17 there is no offsets, that the power plant has to
- 18 go there versus somewhere else and have
- 19 transmission lines. And that's an interesting
- 20 question. I don't think that's really been
- 21 explored.
- 22 PRESIDING MEMBER LAURIE: Mr. Pospisil
- has indicated that that is beyond your expertise,
- 24 is that --
- MR. POSPISIL: Yes.

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1 PRESIDING MEMBER LAURIE: All right.
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- MS. RUDERMAN-FEUER: But, I mean, I
- 3 think it's an interesting issue which should be
- 4 explored. I think a lot of the discussion and
- 5 assumptions in terms of offsets, it has to go in a
- 6 particular place and that it can't go somewhere
- 7 else where there is the opportunity to put the
- 8 power plant.
- 9 Again, that doesn't mean we want to
- 10 interfere with the siting decision. The key point
- 11 we think is that we can make offsets available,
- 12 which comes to the fixes part, if I can move there
- 13 briefly.
- 14 So the question of the day seems to be
- if in the limited area where there are not
- 16 sufficient offsets, how do we create offsets. And
- 17 there have been two, at least, ideas floated
- 18 around, as they've been called, creative
- 19 solutions. One is the opportunity for trading
- 20 between mobile sources and stationary sources,
- 21 basically reducing emissions from mobile sources
- and using those for the stationary source offsets.
- 23 And that is what EPA approved in the Otay Mesa
- 24 situation.
- 25 My understanding is they have not

1 approved it in any other situation, and their

- 2 position, as I think was stated earlier, is that
- 3 it will be addressed on a case by case basis. But
- 4 that's one possible solution.
- 5 Another possible --
- 6 COMMISSIONER PERNELL: Is that one that
- 7 you would be in agreement with?
- 8 MS. RUDERMAN-FEUER: We have concerns
- 9 about mobile to stationary trading, for a number
- of reasons, and I'll tell you what those are.
- 11 First, legally. The Clean Air Act we
- believe says that you cannot create offsets to be
- 13 used for stationary sources from mobile sources.
- They need to come from stationary sources. So one
- is just a pure legal, we think there's a legal
- 16 problem with it.
- 17 The second is a policy issue. We have a
- 18 -- at NRDC have a very strong program on diesel
- 19 exhaust emissions. It's probably our number one
- 20 campaign in -- on air quality, is to cut down
- 21 diesel emissions. So we love the idea of creating
- lots of money to reduce diesel emissions and we
- are strong proponents of the Carl Moyer program.
- 24 However, our concern is that the mobile
- 25 source credits may not meet the requirement of

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being real, quantifiable, surplus, and
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- 2 enforceable, which is what the Clean Air Act
- 3 requires, for a number of reasons.
- 4 For example, in the Otay Mesa context,
- 5 the mobile source credits were created in part by
- 6 --
- 7 PRESIDING MEMBER LAURIE: Yeah. Let's
- 8 not go there, because we haven't issued the
- 9 decision on Otay yet.
- 10 MS. RUDERMAN-FEUER: Okay. I guess just
- 11 -- let me just tell you my -- the concern we have
- is that if you use mobile source credits for a
- 13 power plant you need to show 30 years of
- 14 reductions. And the question -- the concern we
- 15 have is are you really going to get 30 years of
- 16 reductions out of that mobile source either
- 17 retrofit or buying alternative fuel vehicles. So
- 18 we think there are serious problems with the
- 19 mobile to stationary trade in the long term
- 20 context.
- 21 We did not take a position on Otay Mesa.
- 22 In part, one of the complications is it was coming
- 23 up at a time when there were no offsets, and so
- they needed to make a decision quickly. We
- 25 basically stayed out of it. Our view is that the

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1 way to stop that from happening in the future, and
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- 2 we think there is a problem with it, is to get
- 3 more offsets out of stationary sources. And we
- 4 think there are lots of offsets to be had.
- 5 What you need to do is to -- if you
- 6 retrofit an existing power plant with SCR or
- 7 SCONOX, basically installing BACT, to the extent
- 8 that goes beyond the current requirements in that
- 9 region, you will create ERCs. Right now there's a
- 10 lot of power plants in the South Coast and around
- 11 the state that have not been retrofit. So in our
- view, the best way from a policy and a legal
- perspective to create the offsets that you need
- and put them in a bank, is to adopt a rule
- 15 statewide that requires every existing power plant
- 16 to bring their standards up to BACT, but allows
- 17 them to sell those credits. So they get the money
- from the credits, and those credits can be used
- 19 either to expand their own capacity or to build
- new power plants.
- 21 And that, we think, is the number one
- 22 way to go. And the analysis by the South Coast
- 23 AQMD, when they were considering the changes to
- 24 make to RECLAIM, showed that there were huge
- 25 reductions which could be achieved if the power

- 1 plants installed SCR.
- 2 So our view is let's look at the
- 3 stationary source sector. Not only power plants,
- 4 but refineries. For example, when the South Coast
- 5 looked at refineries and power plants and all
- these sources, they've said if we require all
- 7 these companies to install state of the art
- 8 controls which cost on average \$3300 per ton,
- 9 right, we're in a whole different world than
- 10 \$100,000 a ton. \$3300 per ton. They could create
- 11 26 tons per day of NOx reductions, which
- translates into 10,000 tons per year.
- 13 And in my presentation I'm -- we're
- short of time, so I'm not going to hassle with the
- 15 overheads. But you have in my presentation
- 16 materials, when they come to you, you'll see those
- 17 charts which I took out of the materials from the
- 18 South Coast AQMD presentation to its board.
- 19 Ten thousand tons per year of reductions
- just from installing state of the art known
- 21 technologies. We think that can happen across the
- 22 state.
- 23 So our recommendation is the number one
- 24 place to go to find those offsets is to require
- 25 the installation of controls. The problem is that

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for reasons that aren't quite clear to us, or at
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- 2 least complicated, the financial incentives
- 3 haven't been enough. In other words, in the South
- 4 Coast Air Basin, the staff reports have been
- 5 showing that SCR cost, until 1997, somewhere from
- 6 \$300 to \$600 a ton. And yet the utilities still
- 7 didn't install SCR. They just sat and waited in
- 8 the hope that they wouldn't have to pay the price
- 9 ever.
- 10 If the financial incentives aren't
- 11 enough, then we need to have requirements coming
- 12 out of the legislature, or the Energy Commission,
- or the Air Resources Board, however it needs to be
- done to carry it out, to require the installation
- of those controls. It will generate the offsets
- 16 we need in the stationary source sector, and
- 17 address the current problem. Only as a last
- 18 resort should we look at the mobile source sector
- 19 for this problem.
- The other issue that came up was the
- 21 issue of mitigation fund. This is a particularly
- troubling concept for us, and on the slippery
- slope, if you -- our first choice, we think,
- should be getting stationary source offsets. As a
- 25 last resort, then we need to look at mobile source

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1 credits for those offsets. But one step down the
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- 2 line in terms of environmental consequences is the
- 3 mitigation fund concept.
- 4 The problem we have with that concept is
- 5 if you want to bring a power plant, let's say to
- 6 the Los Altos Air Basin -- it's complicated
- 7 because of RECLAIM. Let's say you want to bring
- 8 the power plant to San Diego. Instead of in the
- 9 Otay Mesa situation, they lined up the emission
- 10 reductions from trash trucks and other sources up
- 11 front, before they were going ahead with the power
- 12 plant. What if they just had to pay into a fund?
- 13 Well, if they had to pay into the fund,
- 14 you'd have those emissions from the power plant
- 15 today, but you wouldn't have any guarantee that
- 16 that fund would actually reduce emissions by a
- 17 certain date in a certain amount in the future.
- 18 And we think that's a huge problem for air
- 19 quality. We can't just throw money at the
- 20 problem.
- 21 If you want to have -- if you want to
- throw money at the problem, the governor has
- 23 proposed to put \$100 million into an offset bank.
- 24 If that money is used to create the emissions
- reductions up front, that's one thing. But

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1 allowing a company to site a power plant just by
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- 2 throwing money into a mitigation fund, we think
- 3 has huge problems in terms of air quality.
- 4 Because we just don't know when and if and by how
- 5 much we're going to get the emission reductions.
- 6 So --
- 7 COMMISSIONER PERNELL: I'm sure you have
- 8 articulated that to the governor.
- 9 MS. RUDERMAN-FEUER: We have -- well,
- 10 we've articulated to anyone who will listen to us.
- 11 We -- we have -- certainly that is in our letter
- 12 to the governor. We have communicated that to the
- 13 governor's office, to Cal-EPA. It's in our
- materials we're submitting to you. We feel, as
- 15 you can see, very strongly about that, that it is
- 16 a -- an unwise course to take.
- 17 The other issue that has come up related
- to this issue, since you mentioned the governor,
- 19 which is in the executive order, is we have a
- 20 serious concern that there is an effort by a lot
- of power plants in the state not only to bring new
- 22 power sources without cleaning them up
- 23 sufficiently, but to delay the installation of
- controls on their existing power plants.
- The argument has been we have plans to

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install SCR and we really want to do it, but we
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         need to delay it because that would require us to
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         take our power plant offline while we install the
         controls. And we have a serious concern about
         that, as well, because in our view, again, the
        best way to bring new clean power to the state is
         to create offsets by retrofitting the old dirty
         ones. And so it may take two to four weeks to
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         take an individual power source offline to install
         the new controls, but by reducing those emissions,
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11
         which we can get down to 95 percent reductions, by
         reducing those emissions, we can bring new power
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         sources in.
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                   So we think it's very short sighted if
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         you delay the installation of controls. And there
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         have been requests, we believe, coming to the
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         Energy Commission, to the Air Resources Board, to
         the governor, to delay installing controls.
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                   For example, there are orders with the
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         AQMD, where they have required power plants in the
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         South Coast Air Basin specifically to install
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controls in order to get out of their emission, in
exchange for getting out of their emission
allocations under RECLAIM. And it would be very
unfortunate for air quality if those abatement

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orders don't stick. Because, again, it's those
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- 2 orders that require the installation of controls
- 3 that will help get us out of the current mess by
- 4 creating more offsets and creating a long term
- 5 fix.
- I think that pretty much covers the key
- 7 points I want to make. The only other -- two
- 8 other issues that came up from the other speakers.
- 9 One was the issue of inter-pollutant trading. We
- 10 do share the concerns. EPA has raised some
- 11 concerns about inter-pollutant trading. Our
- 12 biggest concern about the trades is having -- is
- 13 having a better understanding of the relationship
- 14 between NOx and VOCs and the formation of ozone.
- 15 And I've seen, for example, at the South Coast Air
- 16 Basin, there's a lot of debate about what
- 17 combination of VOCs and NOx create ozone, and
- 18 until we have a better understanding it is very
- 19 troubling to us to have a trade between those
- 20 pollutants.
- 21 A second issue which is a very important
- issue that has not come up is the issue what is a
- 23 PM emissions reduction credit. If you're going to
- 24 allow a power plant to emit fine particles, PM2.5
- 25 coming from combustion processes, can you use

1 credits coming from paving a road, which creates

- 2 larger particles. Is that a proper trade.
- 3 And I believe the position of the -- I
- 4 forget if it's the Air Resources Board or EPA, so
- far, is that that is not a good trade. They need
- 6 to be the same. Our view is -- it's the Air
- 7 Resources Board. Our view is that those are very
- 8 different things. A fine particle from combustion
- 9 is not the same as the larger dust coming from
- 10 road pavement. So that you need to get the same
- 11 kinds of offsets. It's almost a form of inter-
- 12 pollutant trading because they're so different.
- And that issue hasn't come up.
- 14 The bottom line is we think that there
- 15 are many things that this Commission can do to
- 16 create offsets without compromising air quality,
- 17 and we strongly encourage you to go down that path
- 18 before the path which is more troubling, including
- 19 mobile to stationary trading and mitigation funds.
- 20 And to the extent you go down that path, that you
- 21 need to do it as a band-aid approach in the
- 22 individual districts where it's needed, and not
- for the entire state, or we may find air quality
- 24 being -- deteriorating in those other areas where
- it wasn't necessary.

1 PRESIDING MEMBER LAURIE: Thank you,

- 2 ma'am, very much.
- 3 COMMISSIONER PERNELL: Just one quick
- 4 statement, so that you can be clear on what we're
- trying to do. Let me just state that we're not
- 6 trying to eliminate any environmental regulations
- 7 or to add any additional pollutants into the air.
- 8 What we are doing is taking information. I think
- 9 you're a very worthy advocate for -- for your
- 10 cause, but I don't think that -- and I don't want
- 11 you leaving here with the impression that this
- 12 Commission is trying to weaken any of the CEQA
- laws whatsoever.
- 14 And -- and not -- I also don't think
- 15 that the governor and the administration is trying
- 16 to do that. We are simply trying to address a
- 17 problem that the state has on a short term basis,
- as well as a long term basis, and I would
- 19 encourage you to continue to work with our Staff
- 20 on some of your ideas. I do think they are good
- ones, but I don't want you to leave with the wrong
- 22 impression about what this Commission is trying to
- 23 achieve.
- 24 MS. RUDERMAN-FEUER: I -- if I could
- just say, I appreciate that, and our expectation

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is that the Commission and the governor will go
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- 2 down the right path. I mean, our hope is we would
- 3 like to work with you to make that -- that happen.
- 4 But we do think there are a lot of efforts to urge
- 5 you to go down the wrong path, so we'd like to
- 6 keep the pressure on to make sure it is consistent
- 7 with air quality goals.
- 8 COMMISSIONER PERNELL: Point well taken.
- 9 PRESIDING MEMBER LAURIE: Pressure
- 10 enough to go around.
- 11 Mr. Tooker.
- 12 MR. TOOKER: Yes, Commissioner. I would
- suggest at this point that we provide an
- 14 opportunity for anybody in the audience who might
- 15 have questions or wants to make comments regarding
- 16 the topic of this morning's discussions, before
- 17 breaking for lunch.
- 18 PRESIDING MEMBER LAURIE: Thank you. We
- 19 will do that. We have three representatives from
- 20 Communities for a Better Environment that have
- 21 requested to speak.
- 22 Why don't you folks determine which one
- of you is going to speak at this time, and that
- 24 person is free to come forward at this time. If
- there's time after everybody else gets a chance,

- then we'll call on a second.
- 2 MR. TOOKER: Commissioner, while they're
- doing that also, I would like to inform everyone
- 4 in the audience that we have run out of copies of
- 5 some of the handouts. We will be making
- 6 additional copies during the noon break, and have
- 7 those copies available when we resume.
- 8 PRESIDING MEMBER LAURIE: Okay. Hi.
- 9 MS. SIMON: Hi. Thank you. I'm Anne
- 10 Simon from Communities for a Better Environment.
- 11 We all turned in cards because we didn't realize
- that they were going to be separate for the
- morning and afternoon. So if you could -- could
- hold on to Ms. Peesapati's for the afternoon, I
- 15 think.
- 16 I would like to make two observations in
- 17 -- in relation to this process. One is that I
- think that many of the people who are involved in
- 19 this important effort to try to figure out what to
- 20 do have fallen into a trap that the modification
- 21 of offsets sets for us, which is to think of air
- 22 quality offsets like pipes or rivets, or other
- 23 physical inputs into the physical construction of
- 24 power plants. They're not. They're congealed air
- pollution, and they can't be moved around like

1 pipes or rivets in the same way, nor should they

- be, because the policy of the Clean Air Act is no
- 3 new pollution without more reduction in old
- 4 pollution. That's what offsets are.
- 5 So that the attempt to create offsets
- 6 that are not really related to improvement in air
- 7 quality in order to have them as construction
- 8 inputs is inconsistent with what the national goal
- 9 for air quality is. And I think at any given
- 10 moment, in thinking about a particular problem, a
- 11 particular policy problem or particular permitting
- problem, it doesn't look that way to us. What we
- see is our particular problem.
- But I think it might be worthwhile, with
- so many people spending so much really good and
- 16 concentrated effort on this problem, to step back
- a little bit and think about the -- to de-
- 18 commodify offsets for a minute, even though there
- 19 are trading markets in ERCs and the particular
- 20 RECLAIM trading market in the South Coast, and
- think about what that pollution, congealed
- 22 pollution really is.
- The -- actually, I have three points.
- 24 The second point which I would like to make, very
- 25 briefly, is to urge everyone here to just give it

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1 up about these mobile to stationary trades.
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- They're not legal under the Clean Air Act. And
- 3 people are wasting a tremendous amount of effort
- 4 in trying to figure out how to make them look
- 5 legal if they look like good policy. And it would
- 6 seem -- seem to me that all that effort and
- 7 creativity ought to be directed into areas that
- 8 will be able to have a constructive outcome. And
- 9 mobile to stationary source trades under the Clean
- 10 Air Act does not look to us as though it will be
- 11 ultimately constructive.
- 12 The -- I'm sorry, sir.
- 13 COMMISSIONER PERNELL: I have a question
- on that.
- MS. SIMON: Yes.
- 16 COMMISSIONER PERNELL: Whether or not
- 17 it's legal or not is -- I'm not an attorney, so
- I'm not going to debate that. But let me ask you
- 19 a question. As it relates to vehicle trips in a
- 20 certain area, and where you've got freeways just
- 21 in a logjam. So the scenario is that if you --
- 22 which is an existing source of pollution. And --
- and from what I've been hearing this morning, is
- that if -- one of the ways in which you can create
- 25 offsets is if you either eliminate or decrease

- 1 existing pollution.
- 2 Given that statement, the scenario that
- 3 was put forth by the representative from the
- 4 Sacramento Municipal Utility District, would you
- 5 consider that a viable scenario?
- MS. SIMON: Well, unfortunately,
- 7 Commissioner Pernell, I don't consider a scenario
- 8 viable if it's not legal under the Clean Air Act.
- 9 So, no. But setting that aside, in policy terms,
- 10 I'd like to refer you back to what Ms. Feuer
- 11 pointed out in her presentation, which is that the
- number of years that a large stationary source,
- 13 such as a power plant, is intended to operate is
- 14 significantly longer than the number of years that
- 15 most polluting sources are going to be on the
- 16 road, so that there is -- it is very unclear, even
- 17 if one wanted to look at such trades independent
- 18 of their legality, it's completely unclear that
- 19 there's a way to connect in number of years to
- 20 structure a mobile to stationary source trade such
- 21 that you would actually be getting the right
- 22 reductions for your stationary source.
- 23 COMMISSIONER PERNELL: Right. I'm not
- 24 -- I don't want to debate this, so just indulge me
- for a couple more seconds. And that is we can

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1 assume that in a number of years, that all of the
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- 2 cars are suddenly going to go off the freeway and
- 3 go away if we don't have public transportation.
- 4 So I guess my point is that you can assume that a
- 5 power plant, or a facility is going to pollute for
- 6 30 years, but you're not making the same
- 7 assumption that people are going to have to get to
- 8 work and going to have to have some form of
- 9 transportation for the -- for the next 30 years.
- 10 So I'm just saying that if you're going
- 11 to -- if you're going to wear it on one side, you
- 12 also have to look at the other side because
- 13 regardless of whether we want it to happen or not,
- 14 the fact of the matter is our freeways are
- 15 congested, and people are sitting on those
- 16 freeways polluting the air, and a lot of that is
- 17 because we don't have adequate public
- 18 transportation.
- So I'll just leave it at that, and
- 20 please go on.
- 21 MS. SIMON: Yes. I couldn't agree with
- 22 you more. CBE couldn't agree with you more about
- 23 that. In fact, we just -- we've been concerned
- about that for a number of years, and I would
- 25 suggest merely that increasing public transit and

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1 reduction in pollution from mobile sources is
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- 2 absolutely essential to do for its own sake. And
- 3 so I think we are in agreement about that.
- 4 And the -- the last point --
- 5 PRESIDING MEMBER LAURIE: We do have to
- 6 give other speakers an opportunity.
- 7 MS. SIMON: Then --
- 8 PRESIDING MEMBER LAURIE: So if you can
- give us about one more minute, we would look
- 10 forward to that.
- 11 MS. SIMON: I have exactly one more
- minute. Which is to urge the Commission in
- 13 considering all of these issues about offsets,
- about controls on existing facilities and on
- 15 location constraints, which Commissioner Laurie,
- 16 you've been particularly interested in, to
- 17 remember that there are questions of environmental
- justice involved in location, that concentrating
- 19 new power plants or repowered and more extensive
- 20 power plants in areas which are already
- overburdened with other sources of pollution,
- 22 whether or not it looks to be efficient, may not
- 23 be the right thing to do.
- 24 And the Commission needs to look very
- 25 carefully at the entire range of impacts on people

1 of power plant siting decisions, and not only on

- 2 the technical considerations that seem to be
- 3 driving some of the questions and some of the
- 4 interchange here.
- 5 Thank you very much.
- 6 PRESIDING MEMBER LAURIE: Thank you, Ms.
- 7 Simon.
- 8 Ms. Tuck.
- 9 We will be taking public comment this
- 10 afternoon, as well, so those of you that have made
- 11 a request to speak that will be here this
- 12 afternoon, feel free to indicate a willingness to
- delay your comments.
- Ms. Tuck, good morning.
- 15 MS. TUCK: Thank you. Good afternoon.
- 16 We certainly appreciate the opportunity to be here
- 17 this morning. We appreciate that the Commission
- is holding this hearing. We think it's very
- 19 timely.
- We believe there is a shortage of
- 21 credits, particularly --
- 22 PRESIDING MEMBER LAURIE: Can you
- indicate who "we" are?
- 24 MS. TUCK: Yes. Thank you. Cindy Tuck,
- 25 with the California Council for Environmental and

1 Economic Balance. I'm trying to be quick, but I'm

- 2 obviously trying to be too quick.
- 3 We have three suggestions this morning.
- 4 The first one has to do with the stringency of the
- 5 offset requirements. As you know, California has
- 6 the most stringent air quality requirements in the
- 7 country. We're not suggesting changing the
- 8 standards by any means, but we would like to
- 9 suggest that the CEC shouldn't go beyond what's
- 10 required by federal law and state law and the
- 11 district rules and regulations. So we'd suggest
- that if there's situations where a project is
- 13 coming before the Commission and the Staff is
- 14 suggesting, for example, additional PM offsets or
- 15 mitigation, that the Commission really look at the
- 16 situation when it's going beyond what's required
- 17 by federal or state law. Just look at that
- 18 carefully.
- 19 That's our first point. The second
- 20 point has to do with an issue that the EPA
- 21 representative raised, which is an EPA policy on
- 22 discounting credits at the time of use. This is
- 23 the RACT adjustment issue. And the EPA
- 24 representative stated that it's required. The San
- 25 Diego representative said that they have concerns

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about that requirement. And we would suggest that
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- 2 it's not required by the federal Clean Air Act.
- 3 It's not in any EPA regulation. It's -- where
- 4 it's set forth is in an EPA internal guidance memo
- 5 out of Washington that never went under any
- 6 opportunity for notice or public comment.
- 7 And so we really think that the state
- 8 should challenge that policy because it's a policy
- 9 that's requiring discounting of credits where it's
- 10 not required by law. So that's something -- and
- 11 we would be glad to provide the Commissioners and
- 12 Staff with more information on that issue at
- 13 another time.
- 14 The third and last issue I'd like to
- 15 raise has to do with a paragraph that's in the
- 16 Staff report, and one of the labels -- it's on
- 17 page 11, and it has to do with credit hoarding.
- 18 That really hasn't been discussed this morning --
- 19 COMMISSIONER PERNELL: With credit what?
- MS. TUCK: The word the Staff used was
- hoarding, h-o-a-r-d-i-n-g.
- 22 PRESIDING MEMBER LAURIE: Credit
- hoarding.
- 24 MS. TUCK: And this is a reference to
- 25 where companies have traditionally banked their

1 emissions and ERCs and they've been in the bank

- for a period of time.
- 3 And we just say that the existing system
- 4 allows companies which, if they voluntarily reduce
- 5 emissions, they get to bank those emission
- 6 reductions in the bank and that's what becomes the
- 7 -- part of the offset system.
- 8 And businesses that are doing
- 9 responsible planning, that think they're going to
- 10 try to grow later or modify their facility, they
- 11 have made a decision to voluntarily reduce their
- emissions and bank them. So they've done that in
- 13 a responsible manner. They shouldn't be forced to
- sell those credits because of the power crisis.
- 15 So we just wanted to note that there's
- 16 another side to that issue which isn't in the
- 17 Staff report. Wanted to make sure you're aware of
- 18 that.
- 19 PRESIDING MEMBER LAURIE: Thank you.
- Thank you, Ms. Tuck, very much.
- 21 COMMISSIONER PERNELL: Could I ask the
- 22 EPA representative to respond to one of the issues
- that were raised?
- 24 MR. NGUYEN: Yeah, let me just clarify
- 25 that. The RACT adjustment requirement means that

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1 at the time of use, whatever available offsets
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- 2 that a source wants to use have to be adjusted,
- 3 have to be reduced, to take into account the
- 4 amount of the level of control that is currently
- 5 required. That means that the available offsets
- 6 would go down, you know. So -- so in terms of
- 7 environmental concerns, I thought it would be a
- 8 plus, not a minus.
- 9 PRESIDING MEMBER LAURIE: Okay. Well,
- 10 we can spend a lot of time on this, and maybe we
- 11 need a separate discussion to get a better
- 12 understanding of what the issue is.
- 13 Did you want to take time now to do
- 14 that, Commissioner Pernell, or do you want to wait
- 15 and see what we have at the end of the day?
- 16 COMMISSIONER PERNELL: Well, I would
- 17 recommend that perhaps during lunch, you get
- 18 together and maybe that's a misunderstanding of
- 19 how it works. But at the end of the day, if it's
- not resolved, perhaps we can take it up then.
- 21 PRESIDING MEMBER LAURIE: Thank you.
- Mr. Martin. Good afternoon, sir.
- MR. MARTIN: Good afternoon, Mr.
- 24 Chairman, Commissioners. I will be mercifully
- 25 brief. My name is Jim Martin. I'm a Senior

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1 Policy Analyst for Environmental Defense in their
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- 2 Oakland, California office. I have just a few,
- 3 very few comments after the excellent panel you've
- 4 already heard from today.
- 5 PRESIDING MEMBER LAURIE: Can everybody
- 6 hear okay? A little closer to the microphone,
- 7 sir.
- 8 MR. MARTIN: I'll try to speak up.
- 9 I appreciate the opportunity to be here,
- 10 and I especially appreciate your willingness to
- 11 tackle this subject, and I only hope that at this
- point you haven't concluded that the subject of
- 13 emissions offsets or emissions credits isn't
- 14 hopelessly complex. I have one special plea here,
- 15 and, as I said, I will be very, very brief.
- 16 We have done a lot of work over the last
- 17 year or so on one particular criteria pollutant.
- 18 That's nitrogen oxide. It's one of the pollutants
- 19 that's emitted from power plants as well as from
- 20 mobile sources, as well. I will confess I've
- 21 never appeared before you, Mr. Chairman, so I
- don't know the protocol. I have some reports that
- cover the subject of my comments, so if I can
- 24 submit those --
- 25 PRESIDING MEMBER LAURIE: The protocol

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is Staff would be happy to receive your input.
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- MR. MARTIN: Great. Well, then --
- 3 PRESIDING MEMBER LAURIE: Provide such
- 4 to Mr. Tooker and Mr. Layton, and they will be
- 5 happy to share it with us.
- 6 MR. MARTIN: That will make my comments
- 7 even briefer.
- 8 The report is a compilation of the most
- 9 recent scientific data and monitoring data that's
- 10 available on the issue or the subject of nitrogen
- 11 oxides. We're particularly concerned about NOx,
- which is one of the pollutants that's the subject
- of emission -- of emissions trading, because of
- its role in a number of different pollution
- 15 problems that contributes to the formation of
- 16 smog, as well as to the formation of fine
- 17 particulates, both of which pose significant
- 18 health effects problems for people who are exposed
- 19 to those pollutants.
- 20 It also contributed to the formation of
- 21 acid deposition, as well as to nitrogen deposition
- downwind of sources. It's also a significant
- 23 contributor here in California, as well as
- 24 elsewhere, to the formation of haze and what are
- 25 called Class 1 areas, national parks and

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1 wilderness areas, places like Yosemite, Sequoia
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- National Park, San Gregorio -- the wilderness area
- 3 out there.
- 4 But perhaps most important, one of our
- 5 principal causes of concern or what's led us to
- 6 this juncture is that unlike all of the other
- 7 criteria pollutants, which are declining in
- 8 concentrations, declining in ambient
- 9 concentrations, nitrogen oxide nationwide,
- 10 regionally in California is increasing. It's the
- 11 one pollutant about which the good news over the
- last 30 years really isn't good news. It's
- increasing in its ubiquity in the environment.
- 14 It gives us -- therefore it causes us
- 15 real concern, and I think it -- if I have one plea
- 16 that I can make before you, it would be that as
- 17 you look at the creative and innovative ways we
- 18 can handle offsets and solve this dilemma of the
- 19 need for more power, as well as air pollution
- 20 problems, that you take special and perhaps even
- 21 extraordinary care in dealing with nitrogen
- 22 oxides, because it's a pollutant that's increasing
- throughout the country, and its complexity is
- 24 perhaps even greater than the complexity you find
- with a number of these other pollutants.

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1 And with that, I said I'd be mercifully
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- 2 brief, perhaps too brief. But I appreciate the
- 3 opportunity to be here.
- 4 PRESIDING MEMBER LAURIE: Thank you, Mr.
- 5 Martin. We very much appreciate it.
- MR. MARTIN: Thank you.
- 7 PRESIDING MEMBER LAURIE: Thank you,
- 8 sir.
- 9 I'm sorry, Commissioner Pernell, did --
- 10 COMMISSIONER PERNELL: Well, no, I was
- just directing him to Mr. Tooker.
- 12 PRESIDING MEMBER LAURIE: Thank you.
- 13 MR. TOOKER: At this point I would
- suggest, if there are no further comments from the
- 15 public --
- 16 PRESIDING MEMBER LAURIE: No, there's a
- 17 bunch of comments from the public. That's why I'm
- trying to do this.
- 19 Again, we have -- is it Mr. or Ms.
- 20 Talwar? Sir. And then we have Mr. Grattan, Mr.
- 21 Murray, and Mr. Allen.
- MR. TALWAR: Thank you. My name is
- 23 Mahesh Talwar. I am President of OceanAir
- Environmental.
- 25 PRESIDING MEMBER LAURIE: Yes, sir.

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1	MR. TALWAR: A couple of comments in
2	terms of discrepancies between various agencies
3	and speakers and environmental groups, as well.

We heard from NRDC and EDC. The speaker

was here prior to me. NRDC seemed to take a

position that mobile source emission reduction

credits are troubling. And they did not take a

position in the case of San Diego.

I had a call for projects from EDC saying the San Diego project was extremely good, and they want to duplicate that model nationwide.

So I'd encourage various environmental groups to also have one common opinion and support whatever is the right thing for environmental cause to do.

Second, discrepancy in agencies
themselves. We have Carl Moyer program. Under
that, they fund various air pollution reduction
programs, and guess where the reductions go? The
reductions go in meeting the obligation which
various air districts ultimately give to state.
State takes those credits and counts them towards
meeting the obligation under SIP. Okay.

Basically, under SIP they're required to have certain amount of pollution reduction. Now, what happens is those do not have to conform

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strictly to surplus, quantifiable, permanent and
enforceable, you heard, because under state bill
that produced the Carl Moyer program allowed these
things to be counted. While, when we apply the
stationary sources, getting reductions from
untraditional sources, they have to go through a
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So I would encourage that there should

be some commonality between the two programs so we

are still doing the right thing, cleaning up the

whole series of environmental events.

11 air, but less complexity in doing so.

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I also want to also pick up the issue of RACT adjustment. We deal with power plant companies exclusively. The credits that are in the bank, they can be adjusted and they have been adjusted going in, meaning when the company was banking those credits, they got reviewed, they got sent to EPA, CARB and other agencies, as well. They got adjusted for reasonably available control technology at that point in time.

I think that is the issue here. When do you RACT adjust? Coming out of the bank, when they are going to be used by power plant. We don't know if Company XYZ has relied on those credits, they bought those credits from a seller,

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1 all of a sudden they go, air district says fine,
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- they generally don't object to that. And ten
- 3 months later they go for review higher up within
- 4 EPA, and lo and behold, they get RACT adjusted,
- 5 they get discounted by 70 percent. All of a
- 6 sudden, there is a crunch.
- 7 That is the real -- that's really the
- 8 issue, and we will, you know, there was a lot of
- 9 other things associated with that, but I just
- 10 wanted to make sure the issue is clearly
- 11 understood.
- 12 And lastly, I want to also address the
- issue of power -- creating emission reductions
- from power plants, existing power plants. I don't
- 15 think I'm wrong, but to my understanding and
- 16 knowledge, most of the power plants in the state
- 17 eventually on a timetable are required to clean up
- their emissions anyway to a level down to a CR
- 19 controls. And therefore, the reductions from them
- 20 may not be surplus long term, thus creating
- 21 offsets for new power plants. That issue needs to
- be explored further.
- 23 On the issue of PM10 credits versus
- 24 PM2.5, the current regulations say basically PM10
- 25 credits are required. PM2.5 is not in any law at

1 this point in time. We get into a debate whether

- 2 2.5 is more detrimental to public health. Then
- 3 you look at PM10, it's composed of three things,
- 4 sulfate, nitrate, and soluble organic fraction.
- 5 One PM10 source may have more sulfate, one PM10
- 6 source may have more nitrate, other one may have
- 7 more soluble organic fraction. Then you get into
- 8 debate, debate that in PM10, which one is better
- 9 for public health.
- 10 So I'll encourage all parties to look at
- it within the context of existing laws and
- 12 regulations. So I guess I'm not debating PM2.5 is
- 13 more detrimental than PM10. But if you look at
- 14 the whole situation within the context of one set
- of laws, it provides more certainty to all parties
- 16 involved.
- 17 Thank you.
- PRESIDING MEMBER LAURIE: Thank you, Mr.
- 19 Talwar.
- Mr. Grattan.
- 21 MR. GRATTAN: Good afternoon, and I will
- 22 be brief.
- I want to point out a problem and
- 24 propose a solution, and solicit the Commission's
- 25 help in getting to that solution.

1	The problem lies with Section
2	25523(d)(2) of the Public Resources Code
3	PRESIDING MEMBER LAURIE: 25523(d)(2)?
4	MR. GRATTAN: Yes. In the Warren
5	Alquist Act. And that requires an applicant,
6	before that applicant can receive a license from
7	the Commission, to have obtained the offsets
8	required to offset that plant, the emission
9	PRESIDING MEMBER LAURIE: Before we
10	certify.
11	MR. GRATTAN: Before we certify,
12	exactly. Before you certify. That requirement is
13	more stringent than most district requirements and
14	certainly more stringent than federal law.
15	Let me point out one example where this
16	provision not only makes life difficult for the
17	applicant and difficult to permit power plants on
18	a on a, you know, a fairly expedited basis, but
19	also impedes air quality creation of air
20	quality benefits. And I'll give you an example.
21	I have a client who proposed a 500
22	megawatt power plant. He had a choice for
23	offsets. He could go to a compressor station
24	which was almost onsite, a lot of emissions from
25	that compressor station, and electrify that

1 compressor station so the emissions went down to

- 2 zero.
- In order to do that, however, first you
- 4 have to negotiate with the owner of the compressor
- 5 station. Then you have to, assuming you get
- 6 through that, then you have to contract for the
- 7 work. And then you have to actually make the
- 8 retrofits, create the offset, which needs to be
- 9 approved by the local district, and surrender the
- 10 offsets. To do that within the one year
- 11 timeframe, let alone the six month timeframe, is
- daunting, if not impossible.
- 13 So what that applicant did was find
- 14 already banked offsets a good distance away, and
- 15 utilized those. Nothing wrong with that, but an
- 16 opportunity to create a local air quality benefit
- was foregone.
- 18 My suggestion, and we're taking this to
- 19 the legislature, is that offsets need to be
- 20 identified as a condition precedent to -- to
- 21 getting a license from here, but that offsets only
- have to be obtained 30 days prior to commencement
- of commercial operation.
- 24 PRESIDING MEMBER LAURIE: Can you get
- 25 financing without offsets?

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MR. GRATTAN: You can get financing if
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         you identify the offsets, and if you have -- if
         you've taken certain steps. And -- and we would,
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         you know, we would not propose to just come in
         with a song and a dance about offsets, but to
         clearly identify and have them be obtainable.
                   COMMISSIONER PERNELL: So given -- let
         me give you a scenario that you probably wouldn't
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 9
         agree with, but --
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                   MR. GRATTAN: You can't disagree with
11
         scenarios.
                   COMMISSIONER PERNELL: -- consider --
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         consider the fact that you go through this. You
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         have -- you give us something that says I have
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         offsets that we're working on. We give you a
15
16
         certificate of certification, you start building
17
         your plant, and the offsets that you thought you
         had you don't have.
18
                   What happens in that scenario where
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What happens in that scenario where
you're applying dependent -- relying upon your
expertise, and are out of, you know, millions of
dollars and still no offsets? Certainly you can't
operate, or there would be a lot of pressure on
air districts to allow you to operate, which I'm
sure folks like NRDC wouldn't approve of.

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- 1 MR. GRATTAN: First, good question.
- 2 First, you have to understand that this is a
- 3 requirement of the Warren Alquist Act. It is not
- 4 a requirement of federal air quality law or most
- 5 district regulations. This is an added thing in
- 6 the -- the Warren Alquist Act.
- 7 Two, number one, I think the applicant
- 8 and the applicant's investors would only take that
- 9 risk if the offsets were identified and if perhaps
- there was a contract for the work, the retrofit
- 11 work to be done, that the work need not have taken
- 12 place in order to get financing, and it need not
- have taken place -- I propose it need not take
- 14 place in order to get a license, that the risk is
- 15 very little and the applicant should take that
- 16 risk. It shouldn't be -- it shouldn't be the
- 17 Commission or the public's risk. If the applicant
- is willing to take it, you ought to let the
- 19 applicant take it.
- 20 COMMISSIONER PERNELL: So you're in
- 21 agreement that if they don't get the offsets, the
- 22 whole project should cease to exist.
- MR. GRATTAN: Well, the applicant should
- find other offsets. But the applicant should not
- be allowed to operate without offsets.

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1 PRESIDING MEMBER LAURIE: How much more
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- 2 would it cost you to get your offsets -- offsets
- 3 post certification than pre certification?
- 4 MR. GRATTAN: How much -- oh, I imagine
- 5 -- I imagine the market would change. But again,
- 6 I'm just suggesting that in the interest of air
- 7 quality, in the interest of speeding this, that
- 8 the Warren Alquist Act ought not to be tougher
- 9 than the existing regulatory schema.
- 10 PRESIDING MEMBER LAURIE: Thank you,
- 11 sir. Thank you, John.
- 12 Mr. Murray. No Otay Mesa. Generic is
- 13 good. No Otay Mesa.
- MR. MURRAY: No Otay Mesa.
- 15 My name is Mike Murray, and I am here on
- 16 behalf of Sempra Energy today.
- 17 PRESIDING MEMBER LAURIE: Do you want to
- share that with us?
- 19 (Laughter.)
- 20 MR. MURRAY: I should've turned that --
- 21 and I've actually been busy for the last several
- 22 months, like a lot of us over at the white
- building, just trying to make sure the lights stay
- on. And we believe that this discussion today is
- 25 invaluable in that whole debate, and to make sure

- 1 that the lights go on.
- 2 We are seeing this as both the short
- 3 term and the long term problem. I can assure you
- 4 that the 5,000 megawatt shortfall that we
- 5 anticipate for the summer of 2001 and 2002 are
- 6 very real. We believe that those numbers are, in
- 7 fact, based on sound forecasts. We think that
- 8 there's three ways that we'd bring to address
- 9 that. One, of course, is the conservation piece,
- 10 which we believe is a very valuable component of
- 11 that. We don't think you get there, though, with
- just conservation, so we need the interruptible
- piece which we are again pursuing through
- 14 legislation to make sure that our interruptible
- 15 programs continue.
- 16 And, of course, the third piece, which
- is what we're discussing today, is how do we site
- 18 these facilities in an expedited fashion and make
- sure at the same time we maintain the standards
- that are currently in place.
- 21 Along those lines, we are exploring
- opportunities in San Diego, through our Sempra
- 23 Energy resources, where we may be able to site
- 24 generation. Of course, one of the constraints is
- 25 the lack of availability of offsets. We firmly

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believe that it makes sense to site facilities
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         near load centers, because I can tell you that
 3
         siting transmission is at least as difficult as
         siting generation. But on the other hand, if you
         don't have transmission facilities it does you no
         good to have these power facilities sitting there.
                   So that's something that we have to
         consider in the mix.
 9
                   PRESIDING MEMBER LAURIE: Do you have an
         understanding about the efficiency factor? Is
10
11
         there a voltage loss based upon transmission?
                   MR. MURRAY: There's line losses. My
12
         understanding is, is that they don't become a
13
         significant part of the equation until it's a
14
         rather long distance, like if you're bringing in
15
16
         power from Wyoming. But for -- for rather minor
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         distances, the line losses are -- are not a
         significant factor. But again, you're outside my
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        realm of expertise. That's what I hear from our
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         folks.
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But two things I think that are critical
to this that have been discussed today, that we
don't see a lot of these projects going forward
unless we talk about the mobile versus stationary
credit issue. We think that that's a critical

1 component that we need to have some kind of

- 2 mechanism to allow for mobile versus stationary
- 3 transfers.
- 4 And the other is the discussion about
- 5 the inter-district transfers, where you have the
- 6 ability when it's available and appropriate to
- 7 provide for inter-district transfers of
- 8 pollutants.
- 9 Thank you.
- 10 PRESIDING MEMBER LAURIE: Thank you, Mr.
- 11 Murray.
- MR. MURRAY: Thank you.
- PRESIDING MEMBER LAURIE: Mr. Allen.
- MR. ALLEN: Good afternoon. I'm Larry
- 15 Allen. I'm with the San Luis Obispo County Air
- 16 Pollution Control District.
- 17 I'm --
- 18 COMMISSIONER PERNELL: Which one is
- 19 that? I'm sorry.
- 20 MR. ALLEN: San Luis Obispo County, down
- 21 along the coast.
- 22 And I'm also current Chair of the
- 23 California Air Pollution Control Officers,
- 24 Planning Managers Association, and the -- that's
- 25 CAPCOA is the acronym. And that represents all

1 the air pollution control districts in California.

- 2 And the districts are definitely acutely
- 3 aware of the ERC shortage situation, and the
- 4 CAPCOA, as a group, is looking at trying to
- 5 undertake a study on how to deal with this issue,
- 6 not just for the power plants in general, but also
- 7 for all the sources out there that may need to
- 8 obtain ERCs in the future.
- 9 And so we've been tasked with trying to
- 10 deal with that, and it's going to be a long term
- 11 effort, I think. But we've started the
- 12 conversation. As you know, the South Coast also
- 13 has an advisory panel that's looking into this
- issue specifically, and are coming up with
- 15 recommendations. I'm sure that we'll work with
- 16 them.
- 17 But I guess one of the key issues that
- came up in all of this, when we started looking at
- 19 it, was the fact that the districts are concerned
- that the incredible use of ERCs by the power
- 21 plants, you know, the large build-up of power
- 22 plants that is currently occurring, that is
- 23 proposed for the future, is going to deplete
- available supply out there for other industry that
- 25 may need to use these. So we're very concerned

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1 about trying to come up with a solution for that.
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2 And one of the key issues, and I think 3 that EPA and the Air Resources Board shares this, and I know that the South Coast has talked about this in their efforts, is that the surge for ERCs seems to be superseding efforts to advance control technologies that can actually reduce the need for that. I think that the power plants are trying to 9 pick the plums out there, and it's -- it's 10 reducing the supply and driving up the cost, when 11 in fact there are controls that are available at the facilities themselves. 12

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- New technology, in particular the -- is available out there. SCONOX, for one, can significantly reduce the need for NOx offsets, for PM offsets, and for carbon monoxide offsets. But because we don't have a proven plant of this 500 megawatt size in practice, it's been difficult to actually get the sources to agree to commit to that. Some of them have agreed to it, but there are a lot of qualifications that are placed on those agreements.
- Also, encouraging the project applicants
 to try and meet their requirements by looking at
 facilities nearby that are actually

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undercontrolled or maybe even unregulated, and
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         trying to reduce emissions there. The previous
         speaker had a good point, and I think this is
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         something that we need to look at much more
         strongly in trying to get controls of facilities
         that are undercontrolled. Our own permitting
         requirements, and certainly the CEC's permitting
         requirements work against us a little bit there,
 9
         because of the need to have those offsets in place
10
         before facilities begin their operations.
11
         Sometimes, in the CEC case, before they even begin
         construction.
12
                   And we may need to look at modifying our
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         rules to allow that to be accomplished, or to look
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         at some interim types of offsets that can be put
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16
         in place before those controls are available at
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         nearby existing facilities, like using mobile
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         source emission reduction credits to fill the gap
         before we can actually get those in place.
19
                   And I think that that might be a good
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21
         thing to look at requiring that search before they
         start picking up the ERCs that are out there and
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energy facilities that have the resources to do

I think it would be very good to have

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available.

this, just go out and do some surveys in districts

- 2 and looking at what types of emission reductions
- 3 are available from unpermitted sources. This is a
- 4 fairly expensive and time consuming process.
- 5 There are a lot of sources out there. For
- 6 instance, agricultural irrigation pumps out there,
- 7 that have the significant potential for providing
- 8 emission reduction credits, but a lot of districts
- 9 don't know where they are, how many there are, how
- 10 often they operate, what their fuels are, and so
- 11 forth. And it would be good to conduct a survey
- 12 like that, I think.
- The -- some of our own control
- 14 requirements sort of exacerbate the shortage of
- 15 ERCs by increasing emissions of one pollutant when
- 16 you're decreasing emissions of another one. For
- 17 instance, sometimes carbon monoxide catalysts can
- increase emissions of PM10, so you increase a
- 19 requirement for PM10 offsets there. That's not a
- 20 problem for some of the control technologies, like
- 21 SCONOX.
- I think that the -- the shortage of PM10
- 23 offsets has significantly increased the use of NOx
- offsets as inter-pollutant trades, and is going to
- 25 significantly reduce that supply because the

roads and so forth.

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trading ratios that are required there are

typically beyond two to one. So that can be a

difficulty there. There may be some things that

we can look at. For instance, giving greater

offset credit for PM reductions from diesel

equipment, which has a much greater health impact

than PM emissions from off road -- from unpaved
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And I think that's pretty much my

comments. I didn't really have anything prepared.

I just wanted to make you aware of the fact that

CAPCOA is looking at this. We intend to spend a

long time in trying to come up with a solution,

and we're trying to marshal all of the important

players to look at the problem.

I would like to echo the fact that just personally, anytime I have a chance to address you guys, I believe that conservation is an incredibly important part of this in trying to reduce the actual need for the ERCs through the -- by reducing the demand for the power plants. We are right now determining our energy future out there by the number of power plants that we have being proposed right now, with very little focus on renewable technologies, because they can't compete

1 right now. And they don't have the financial

- 2 resources to actually bring these proposals to the
- 3 table at the moment.
- 4 And I think that that's a -- a big
- 5 problem, and to the extent that we can delay the
- 6 need for new capacity by increasing our
- 7 conservation efforts, I think that we allow a
- 8 better promise for those technologies in the
- 9 future.
- 10 PRESIDING MEMBER LAURIE: Thank you, Mr.
- 11 Allen, very much.
- 12 COMMISSIONER PERNELL: One question.
- 13 You mentioned new technologies, SCONOX. Are you
- aware of any existing facility that are 500
- 15 megawatts or more that are using this technology?
- 16 MR. ALLEN: Not at the moment. I know
- 17 that there are -- and probably Chris Tooker could
- 18 address this better than I can, because I haven't
- 19 followed all the projects. There are at least two
- or three projects that have committed to install
- it on one turbine, as a demonstration. But I['m
- 22 not sure what the status of those are right now.
- I do know that EPA has identified it as
- a best available control technology, and suitable
- for use.

1 COMMISSIONER PERNELL: But -- maybe I

- 2 can hear from Mr. Tooker on this.
- 3 MR. TOOKER: I don't have anymore detail
- 4 on that today than -- than Larry has already
- 5 mentioned.
- 6 COMMISSIONER PERNELL: What I'm leading
- 7 to is whether or not it's a proven technology for
- 8 the application of large power plants.
- 9 MR. ALLEN: Well, the manufacturer
- 10 certainly seems to think it is.
- 11 COMMISSIONER PERNELL: Well, naturally.
- 12 (Laughter.)
- 13 MR. ALLEN: But, you know, someone's got
- 14 to give it a chance. I mean, to the extent that
- 15 it can provide significant reductions above and
- 16 beyond what we get with SCR, and it's also, in my
- 17 mind, much more environmentally friendly, you're
- 18 not using ammonia out there. So I --
- 19 COMMISSIONER PERNELL: I'm not speaking
- 20 against it. I'm just trying to --
- 21 MR. ALLEN: No, I understand that. But
- 2.2 --
- 23 MR. TOOKER: I believe Mr. Nazemi has
- some information to provide.
- 25 MR. NAZEMI: Yeah, I can quickly respond

1 to that. The answer to your question is there are

- 2 no existing 500 plus megawatt projects that use
- 3 SCONOX, but our district has evaluated SCONOX for
- 4 over two years, and we see no technical reason why
- 5 it can't be scaled up to that size. The issue
- 6 that has been brought up before us in one power
- 7 plant siting project that is proposing to use that
- 8 is the issue of high temperature SCONOX versus low
- 9 temperature.
- 10 As you know, in South Coast SCONOX has
- 11 been in use at a 30 megawatt project for over a
- 12 year, and in the State of Maine there has been a
- 13 project that uses a high temperature SCONOX at a
- 14 smaller size megawatt. And the issues that have
- 15 been raised with those two projects we don't
- 16 believe are technically strong to suggest that a
- 17 scale up is not doable.
- 18 PRESIDING MEMBER LAURIE: Okay. We're
- going to take a break to 1:30.
- I'm sorry.
- 21 MR. TOOKER: I was going to say EPA
- 22 might want -- they've also been part of that
- evaluation, and might want to comment.
- 24 PRESIDING MEMBER LAURIE: Thank you.
- MR. NGUYEN: I can comment later.

1	PRESIDING MEMBER LAURIE: Yeah. Well,
2	why don't you do that as soon as we come back.
3	Our thanks to the panelists. Thank you,
4	ladies and gentlemen, very much. And we'll see
5	you all back here in a half-hour, 1:30, otherwise
6	it's not fair to the rest of the folks, so we
7	can make it back by 1:30, we'll start at 1:30.
8	(Thereupon the luncheon recess
9	was taken.)
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1	AFTERNOON SESSION
2	PRESIDING MEMBER LAURIE: If you could
3	take your seats, members of the panel, we would
4	appreciate if you could come forth.
5	MR. TOOKER: Commissioner Laurie
6	PRESIDING MEMBER LAURIE: Gentlemen, if
7	you could take your seats, please.
8	Mr. Tooker.
9	MR. TOOKER: Yes. This afternoon our
10	panel members are going to be talking about
11	Innovative Offset Sources and Solutions for Lack
12	of Offsets. And as we heard this morning, that
13	may be very district specific, and pollutant
14	specific.
15	First person I have up this afternoon is
16	Mohsen Nazemi, but he's not here at the moment, so
17	I will ask Mr. Steve Moore from San Diego Air
18	District to give his presentation, which I believe
19	is going to focus on MERCs.
20	Steve.
21	MS. TOWNSEND-SMITH: Chris, can I ask
22	you a quick question? Is the handout outside
23	different from Mohsen that was given this morning?
24	There's another handout on the table. Is it

different than what he presented this morning, the

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hand out that's out there now?
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- 2 MR. TOOKER: Who presented?
- 3 MS. TOWNSEND-SMITH: Mohsen. He just
- 4 walked in, too.
- 5 MR. TOOKER: Mohsen Nazemi?
- MS. TOWNSEND-SMITH: Yes.
- 7 MR. TOOKER: I don't believe it's
- 8 different. It should be what he presented this
- 9 morning.
- MS. TOWNSEND-SMITH: Okay.
- MR. TOOKER: Well, here's Mohsen Nazemi.
- 12 The first person we have on the agenda this
- 13 afternoon is Mohsen Nazemi, to speak about area
- sources as options for offsets.
- 15 MR. NAZEMI: Thank you. Good afternoon.
- 16 PRESIDING MEMBER LAURIE: My apologies
- for the rushed lunch.
- MR. NAZEMI: What lunch?
- 19 (Laughter.)
- 20 MR. NAZEMI: I'll -- I'm Mohsen Nazemi
- 21 with South Coast Air Quality Management District,
- and in the benefit of time I'll be very brief on
- 23 my afternoon presentation. I don't have a formal
- 24 presentation for you, but I think it's important
- 25 to talk about a few issues as it relates to

- 1 alternative sources of offsets.
- 2 As far as the area source offsets are
- 3 concerned, the South Coast AQMD has been involved
- 4 in issuance of some emission reduction credit for
- 5 area sources. The particular project that we have
- 6 worked on was a project that at the time San Diego
- 7 Gas and Electric and Southern California Edison
- 8 were considering a merger. Part of the CEQA
- 9 process, they had offered as mitigations for CEQA
- 10 the conversion of a number of agricultural engines
- into electric engines. And as a result the
- 12 emission reductions was to be utilized for
- mitigating the CEQA impacts associated with the
- merger.
- 15 Since the merger fell through, the
- 16 Southern California Edison approached the district
- 17 and requesting those emission reduction credits to
- be banked as a form of ERC, and ultimately be
- 19 utilized for that reason.
- 20 Under district rules, emission reduction
- from not permitted equipment are allowable,
- 22 provided there is the same five criteria, being
- permanency, enforceability, quantifiability,
- 24 surplus, and others are met. And so ultimately,
- after a number of years of discussion, we reached

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1 a conclusion and issued those ERCs to Southern
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- 2 California Edison. They were on an annual basis.
- 3 They were in the neighborhood of 75 tons per year,
- 4 and they were issued from -- for a ten year period
- from 1993 through year 2003, and each year for
- 6 that amount. And recently, those credits were
- 7 converted actually into RTCs and introduced into
- 8 the RECLAIM market.
- 9 I think the issue that relates with the
- 10 area source and all other sources of credits, such
- as mobile source credits, are that those are
- allowable, or should be allowable if they're over
- 13 and beyond what the existing requirements in terms
- of the regulatory requirements, have those
- 15 emissions be available for banking. And our --
- our position is that if they're also accomplished
- in a faster timeframe than the regulatory
- 18 requirements are in place, that they should also
- 19 be allowed to be used.
- 20 And in one sense, if you look at the
- 21 mobile source, for example, as -- as a comparison
- 22 to emission reduction credits, there are a number
- of programs that state or federal government may
- have in mind. I mean, we keep hearing about
- 25 alternative fuels vehicles, we keep hearing about

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1 clean diesel and all that. The issue then becomes
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- 2 are these types of conversions allowed for
- 3 emission reduction credits. And if you only look
- 4 at are they over and beyond the regulatory
- 5 requirements, probably the answer is no, because
- 6 ultimately somebody's going to do that.
- 7 But the question whether or not you can
- 8 accomplish them in a shorter and a faster
- 9 timeframe I think is worth considering, because if
- 10 somebody will do those conversions today instead
- of ten years from now, it should -- equity
- question comes up and whether there should be this
- 13 type of emission reductions historically has not
- 14 been allowed for stationary sources. But because
- of the nature of mobile source, we just heard a
- 16 lot of testimony earlier that their life is
- 17 shorter than a stationary source project, and
- 18 therefore I think this would be an ideal type of a
- 19 situation.
- 20 The district has adopted a number of
- 21 rules so far that deals with mobile sources. We
- 22 call them our fleet rules, that deals with trash
- trucks, transit buses, and so on and so forth.
- 24 And one other issue that I wanted to
- 25 bring up relevant to controls or retrofitting

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existing power plants, for example, as a mean to
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         generate these credits, is that if you have a
         program such as RECLAIM, I think that fits very
 3
         well into that type of a program, because you
         generate credits that are being marketed towards
         both existing and new or expansion of facilities.
                   When you're outside the RECLAIM type
         market, then you're -- you're stuck with the issue
 9
         of are these credits going to be discounted, and
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         how much. Are they going to be discounted at the
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         time of issuance, or at the time of the use. And
         when you look at all those, I'm not sure that
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         there's going to be a significant amount of
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         credits that can be used.
                   Now, I'm not saying that the power
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16
         plants should not control their emission. I think
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         that's -- that's a must. And our agency's
         position has been that we are certainly
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         encouraging that and supporting that. But I think
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         that we need to be careful to say that if they put
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21
         on controls, there's going to be an abundance of
         credits that are going to be generated, because
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         once you look at the other requirements within the
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leave a whole lot of credits for use.

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context of the rules, then there's not going to

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1 That, in a nutshell, is what I was going
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- 2 to talk about in terms of the area source credits.
- 3 Be happy to answer any questions you might have.
- 4 MR. TOOKER: I do have a question for
- 5 Mr. Nazemi.
- 6 Mohsen, with respect to installing
- 7 controls on existing facilities, could you briefly
- 8 mention some of the criteria that are used in
- 9 evaluating the amount of credits that are
- 10 provided, let's say, to a facility that has not
- 11 been used extensively in the past, although it may
- 12 be very large and it may be very dirty, does it
- have or not have, in fact, a lot of credits
- 14 available.
- 15 MR. NAZEMI: Yeah, that's a very good
- 16 question, Chris. It's -- it goes back to the
- 17 element of real, when you -- under our rules, for
- 18 example, if you are looking at emission reduction
- 19 credits, what we have to do is look at the last
- 20 two years of operation of a source, and base the
- 21 credits on the actual operation.
- So if you have a source that has not
- 23 been utilized very much for a couple of years, and
- 24 then they decide to put on controls or shut down
- 25 that source, the amount of credits that would be

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available would be very limited. We also have a
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         requirement, as I mentioned earlier, that we would
         discount it at the time of issuance to not RACT,
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        or reasonable achievable control measure, but
         rather -- rather BACT levels. And one can argue
         that technologies that are out there today are
         generally BACT, and to accomplish emission
         reductions of any significant amount you almost
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 9
         have to shut down a plant or equipment to create
10
         that, because once a BACT discount is in place
11
        that would not leave you a significant amount of
         reductions to use as a credit or offsets.
12
                   MR. TOOKER: One more question. You've
13
         talked about using area source credits, such as ag
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         engines. What do you believe would need -- what
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16
         actions do you think would need to be taken either
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         by the district or by EPA to make those kinds of
         sources acceptable for developing credits?
18
                   MR. NAZEMI: From South Coast's
19
20
         perspective, we have both area source and mobile
2.1
         source credit programs that have been submitted to
         EPA for approval, and certainly would be one
22
         action that could make those types of credits
23
         available for broader use. And those would be --
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I think the first step would be to get EPA to

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1 approve the programs that are already adopted and

- 2 in the books.
- 3 The other -- the other part of it that I
- 4 think is important for the credit generators and
- 5 users to keep in mind is that until there is a
- federal approval of this -- these types of
- 7 programs, that it doesn't matter how much the
- 8 local or state accomplishes, because it really
- 9 ultimately puts the end user at risk. And we have
- 10 seen that happen before. It would be either a
- 11 federal enforcement action or a citizen lawsuit
- that ultimately result in the -- I guess the
- 13 payback of using the type of alternative emission
- 14 credits that was not ultimately federally
- 15 approved, even though at the local and state level
- it went through the necessary steps to get them to
- 17 be approved.
- We had a situation similar to that
- 19 relevant to use of mobile source emissions to
- 20 offset a stationary source by delaying
- 21 installation of controls, and even though our
- 22 board had adopted it, ultimately the company who
- used that ended up being subject to federal
- 24 enforcement action.
- MR. TOOKER: Thank you.

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1 PRESIDING MEMBER LAURIE: Thank you, Mr.
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- 2 Nazemi. And we deeply appreciate your time and
- 3 your district's time in making you available
- 4 today. And thank you very much.
- 5 Mr. Tooker.
- 6 MR. TOOKER: Yes. The next speaker we
- 7 have is Steve Moore, from San Diego, again, to
- 8 talk about the MERCs program.
- 9 Steve.
- MR. MOORE: Thanks, Chris.
- 11 I'm going to discuss a MERC program that
- 12 we developed in San Diego County. I have to say
- 13 this was in conjunction with the Otay Mesa
- 14 Generating Project.
- 15 PRESIDING MEMBER LAURIE: Yeah. What
- 16 I'd ask you to do is to the extent that you can,
- 17 you'll speak generically.
- 18 MR. MOORE: I'll try to do that.
- 19 PRESIDING MEMBER LAURIE: The status of
- Otay is a decision is pending.
- MR. MOORE: I understand.
- I guess we're not going to have any
- visuals here. But as I mentioned this morning,
- 24 the Otay -- the project was a major source that
- 25 requires 120 tons of offsets. After sort of

1 extensive looking around for ERCs, they approached

- 2 us because they could only come up with about 50
- 3 tons of ERCs, to try and develop a MERC program.
- 4 And just quickly, looking at the issues involved,
- 5 we realized it would require a lot of close
- 6 cooperation between us and the Air Resources
- 7 Board, and EPA.
- 8 There are a lot of issues that are
- 9 raised in regards to mobile sources, whether it's
- 10 permanent, enforceable, quantifiable, real and
- 11 surplus. The programs that were suggested were
- 12 replacing heavy heavy duty vehicles in refuse
- 13 collection or trash trucks, and also repowering
- 14 marine vessels. And there was also a provision in
- 15 the program for replacing medium heavy duty
- 16 vehicles, diesel powered vehicles. But that -- no
- 17 one's actually exercised that yet. There are
- applications in for the trash trucks and for
- 19 several marine vessels. And the replacement is
- 20 with natural gas-fired vehicles, either LNG or CNG
- vehicles.
- The issues that were sort of the
- 23 thorniest to resolve -- there were a lot of issues
- 24 involved -- were, one, making the credits good for
- 25 the life of the project. Our resources review

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1 rule say that any credit that's used has to be
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- 2 valid for the life of the project. As has been
- 3 mentioned several times, MERCs are generally
- 4 considered -- mobile emission reduction credits
- 5 are considered to have finite lifetimes.
- 6 Another issue was basically addressing
- 7 the possibility that those emissions could be
- 8 displaced. It can be an issue in other
- 9 situations, too, but by displace they mean if
- 10 someone repowers or replaces their vehicles with
- ice cream vehicles and a competitor comes in with
- 12 dirty vehicles that are going to run cheaper, his
- 13 activities go down and we don't really get the
- emission reductions that we thought we would.
- 15 And another issue was the local impacts,
- 16 whether there were going to be local impacts from
- 17 the plant that weren't going to be offset by the
- 18 MERCs.
- 19 We have a rule, Rule 27, that does allow
- 20 creation of mobile emission reduction credits.
- 21 However -- it should be -- should be available --
- I do have a diskette, though, if you want to try
- 23 it.
- 24 (Pause.)
- 25 MR. MOORE: As I was saying, we do have

1 a rule, Rule 27, that allows the creation of

- 2 MERCs. But the programs that were explicitly in
- 3 the rule were not adequate for use as new source
- 4 review offsets.
- 5 But there was a provision in the rule
- 6 that allows the air pollution control officer to
- 7 approve alternative programs with the concurrence
- 8 of ARB. And that's the route we took.
- 9 We developed a program, like I said,
- 10 replacing heavy heavy duty vehicles and repowering
- 11 marine vessels. We narrowed the program to the
- trucks and refuse collection because they're
- 13 captive weights around San Diego County. They're
- 14 not likely to go anywhere. And the marine vessels
- are also ones that have applied -- anyway, are --
- 16 basically operate in San Diego and don't go
- anywhere, have been in business for a long time,
- which gave everyone a lot of comfort.
- 19 In addition, the lifetime for the trash
- 20 trucks is fairly long, 10 to 12 years -- 8 to 12
- 21 years, probably. And the marine vessels have a
- 22 very long lifetime. Most people think that their
- 23 lifetime is 30 years or more. And generally the
- 24 engines in those -- those vessels are rebuilt over
- and over again and not replaced for the life of

- 1 the vessel.
- We did put a requirement in the program
- 3 to require a minimum life for any vehicle or
- 4 vessel that came into the program just to prevent
- 5 someone from trying to scrap cars, or something
- 6 like that.
- 7 As I said, the marine vessels have a
- 8 lifetime of about 30 years. And both ARB and EPA
- 9 were willing to consider those credits be valid
- 10 for the life of the project. So if you were using
- 11 them to offset a power plant you didn't need to do
- 12 anything to those credits as far as the lifetime
- went to make them useful.
- 14 However, the trucks have a short
- 15 lifetime, and the problem was to try and find a
- 16 way to extend the lifetime, if you will, so that
- 17 it would be valid for the life of the project.
- 18 EPA and the ARB both had different ideas how to do
- 19 that. They weren't mutually exclusive.
- 20 The EPA's idea is basically what they
- 21 call no backsliding, which means that once you
- 22 replace an engine in a marine vessel, or replace a
- truck, any future replacements have to be as good
- or better than the original replacement, as far as
- 25 emissions go. Or, they have to comply with any

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rules that are in place at the time. So the

emissions are always going down, not up. If you

do that, EPA usually considers the life permanent.
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The Air Resources Board had a different concept, and their concept was front loading, and by that they mean that if the project has a nominal life of 30 years, the stationary source project, you'd have to get 30 years' worth of emission reductions within the lifetime of the vehicle or vessel. And that was implemented in the program by applying a discount factor to any vehicle that had a lifetime less than 30 years.

Actually, discount factor for marine vessel is one, so you have a discount factor but it doesn't have the impact.

And by way of example, if you have a vehicle that has a lifetime of ten years, and you're trying to offset the emissions from a project for 30 years, they would get discounted the credits you issue for that vehicle. So they have one ton per year of credit, it would get discounted by a factor of three. So it's only worth a third of a ton.

We kind of like that. It provides more
benefit up front. You get much larger emission

1 reductions than you would just straight up.

- 2 (Pause.)
- 3 MR. MOORE: Okay. Well, just roll them
- 4 through. I'm on extending credit life right now,
- 5 and hopefully you can catch up.
- An example of a ten year life vehicle
- 7 for a 30 year project, you basically get three
- 8 times the emission reductions up front that you
- 9 would normally for the first ten years of the life
- of the trucks. And the EPA requires those
- 11 emission reductions to stay in place forever,
- 12 essentially. That overstates the case a little
- 13 bit for the projects that we have in. The credits
- are only going to be good for 20 years, so the
- 15 discount factor is not as great, and some of the
- 16 trucks have lives more than ten years. But you
- 17 still get a benefit of maybe one and a half to
- 18 one.
- 19 The displacement issue also involved a
- lot of work and, once again, both the Air
- 21 Resources Board and EPA had different ideas how to
- 22 address it. EPA's idea is a minimum activity
- 23 level, which basically means that you're tracking
- the fuel use or hours of operation or vehicle
- 25 miles traveled, or something like that, to be sure

1 that the mobile source is continuing to operate in

- 2 the same manner it did when -- as when the credits
- 3 were generated.
- The Air Resources Board idea was -- was
- 5 similar, but not exactly the same. They want a
- 6 schedule of -- of when those mobile sources were
- 7 going to be replaced in the future and how long
- 8 they're going to be operating and that you have to
- 9 maintain that schedule within a -- a certain
- 10 amount.
- 11 That only applies, the ARB's activity
- level or displacement tracking only applies to on
- 13 road vehicles. It doesn't apply to the marine
- vessels.
- 15 As a result of this issue there's a lot
- of record keeping that's generated. The mobile
- 17 source owner is responsible for keeping lots of
- 18 records about his operations, and then
- 19 transmitting those records to the user of the
- 20 credit. And the user of the credit has to keep
- 21 records of what the actual emission reduction is
- 22 being achieved by the mobile source. And they --
- so the use the activity levels being reported by
- the mobile source owner to calculate emission
- reductions and also check to be sure that the same

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1 number of vehicles are on the road that they said
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- there were going to be on the road.
- In addition, the MERC user is on the
- 4 hook for any kind of deficit. If the activity
- falls off, they have to do something to make it
- 6 up, either come up with more offsets, reduce their
- 7 operations, put on additional controls, something
- 8 to come up with more offsets.
- 9 PRESIDING MEMBER LAURIE: What happens
- 10 to those records, are they submitted somewhere?
- MR. MOORE: They're submitted to us.
- 12 They're submitted -- they have to be submitted to
- 13 the mobile -- whoever's using the credit and us,
- 14 basically.
- 15 PRESIDING MEMBER LAURIE: So then does
- 16 somebody read them?
- 17 (Laughter.)
- MR. MOORE: Well, I guess we'll see.
- And we plan to read them, I'm sure.
- The local impacts were addressed by
- 21 limiting the program. The program is limited to
- 22 providing offsets for new source review only. You
- can't provide offsets to get out of a prohibitory
- 24 rule, something else you would have to comply
- 25 with. You can only get credits for NOx. You

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can't get credits for PM10 or anything else
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- through the program, or VOCs, in particular.
- 3 And you cannot do any inter-pollutant
- 4 trading, so you cannot convert these NOx credits
- 5 into VOC credits. On the issue of VOCs, you know,
- 6 have various levels of toxicity, and so there's
- 7 some concern about trying to use mobile sources to
- 8 create credits, VOC credits.
- 9 There are some benefits, a lot of
- 10 benefits to the program, in summary. I think --
- 11 and these are real emission reductions. You get
- immediate reductions in excess of what you
- 13 normally would get in the new source review
- 14 process. In addition, it reduces diesel
- 15 particulate as a side benefit of the program, and
- 16 as we all know, recently declared a carcinogen --
- and it does provide needed offsets in San Diego.
- We have applications for -- for 120
- 19 trash trucks in right now, conversion of trash
- 20 trucks and also I think eight or nine marine
- vessels have applied under the program.
- There are some drawbacks. It's limited
- in scope, as I said, deliberately so. There's
- 24 extensive user record keeping involved, which is
- 25 different than most emission reduction credits.

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Once you buy a credit, usually you don't have to
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- 2 keep any records. Usually the user surrendered
- 3 the credit. It's whoever generates the credit
- 4 that has to keep records. But under this program,
- 5 the user of the credit has to keep records too,
- 6 and do some calculations on the actual emission
- 7 reductions.
- 8 And there is also potential liability
- 9 for the user, which is not theoretically
- 10 different, but sort of practically different, much
- 11 more explicit here than in the standard stationary
- 12 source emission reduction credit program.
- 13 In general, a stationary source emission
- 14 reduction credit, we have someone who gets a
- 15 permit to operate. The conditions to enforce the
- 16 credit are on that permit to operate, and then if
- 17 something goes wrong we go after them. We don't
- go after the user of the credit. Theoretically,
- 19 we could invalidate the credit, but I -- I cannot
- 20 recall that ever happening. But in this case,
- 21 they're explicitly on the hook, basically, for the
- 22 actual emission reductions.
- 23 And, finally, it is costly. I mentioned
- in the morning that the cost for ERCs were \$70,000
- a ton. I don't precisely know what the cost of

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the MERCs are, but my guess is they're in excess
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 2
         of $150,000 a ton. Part of the cost just comes
         from the creation of the credit and the cost of
 3
         developing the program, which was considerable and
         required a lot of work. The program is very
         narrow in scope. Both ARB and EPA indicated that
         any additional programs would not necessarily --
         they'd have to be done on a case by case basis I
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 9
         guess is what I'm trying to say. So we would have
10
         to go through another program development in order
11
         to try and get credits for some other source
         that's not specifically identified in the program.
12
                   In addition, there is a clock ticking on
13
14
         the emission reductions from the on road heavy
         heavy duty vehicles. The settlement agreement
15
16
         between ARB and EPA and the engine manufacturers
17
         requires that emissions from new diesel vehicles
         is dropped to two and a half grams per three
18
         quarts per hour in October 1st, 2002.
19
                   Right now, the emission reductions are
20
21
         being generated by using natural gas fired
         vehicles that get about two grams per -- per hour.
22
         New on road vehicles get 4.4 or even 5.4 under
23
         some situations. So it's a difference in that
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         that's generating the reductions. When the
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standards drop to two and a half, it'll be much
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- 2 more difficult to generate significant amounts of
- 3 emission reductions under this program.
- 4 PRESIDING MEMBER LAURIE: Thank you,
- 5 sir. Good explanation of your program.
- 6 Question. And I'm going to be
- 7 interested in a response, if any, that other
- 8 panelists may have, as well.
- 9 If, for purposes of discussion, it's
- 10 determined that it is a good thing to place power
- 11 plants near the load requirement, where the
- 12 population centers are, use -- and assuming for a
- 13 moment that that is a public policy, legislative
- or otherwise, but somebody made the determination
- 15 that because of a number of factors you really
- 16 want power plants near the load.
- 17 Do the rules and the mechanisms of
- operation for the individual air districts promote
- 19 that policy, or are they a barrier to that policy.
- That is, if you were to put up a map of where all
- 21 the people are, and my guess is in most areas of
- 22 California -- I could be wrong, but in most areas
- of California where most of the people are is
- 24 where you have the greatest challenges from a
- 25 health -- air health perspective, so you impose

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1 stricter standards in those areas. And as a
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- 2 result of that, there's fewer credits available.
- 3 And as a result of that, power plants can't go
- 4 there, they have to go somewhere else.
- 5 Are we addressing conflicting policies,
- or are the policies of air districts consistent or
- 7 potentially consistent with a public policy of
- 8 permitting new power at the load centers? Do I --
- 9 is that question intelligible at all?
- 10 Maybe I can try it again. We need to
- 11 put power plants where the people are, and is that
- inconsistent with what you think your rules are.
- 13 MR. MOORE: Our rules mainly address
- 14 public health. That's -- that's the focus of our
- 15 rules. And, you know, a power plant is treated
- 16 like any other site that tries to locate in our
- 17 district. I mean, they have to go through a
- health risk assessment, there's air quality
- 19 impacts for criteria pollutants, apply BACT, and I
- would say in general that the rules are more
- 21 stringent in the more populated areas of the state
- 22 because those are the ones that have the air
- pollution problems.
- 24 PRESIDING MEMBER LAURIE: What about
- other land uses besides power plants. Let's say

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on any other heavy manufacturer that's liable to
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- 2 have significant air impacts. And let's assume
- 3 for purposes of discussion that whatever it is I'm
- 4 producing is a good thing, rather than a bad
- thing. And, of course, it depends on everybody's
- 6 different perspectives.
- 7 If the standards are more restrictive in
- 8 heavily urbanized area, do those standards
- 9 directly or indirectly tell me, as a manufacturer,
- 10 to go somewhere external to those urban areas
- where some land use planner might say we don't
- want this stuff in Modesto, or Auburn, it should
- go in the more heavily populated areas. Are there
- 14 conflicting public policy questions here?
- 15 MR. MOORE: I would say probably. I
- 16 mean, anyone that wants to locate anywhere in
- 17 California or the nation is going to consider all
- sorts of things, like transportation costs,
- 19 availability of housing, availability of energy,
- 20 water, and probably what the air pollution
- 21 controls are, as well as other regulations that
- 22 might be in effect. Land use regulations, or
- whatever.
- You know, that's for them to sort out
- and decide where the best place to locate their

- 1 operation is.
- 2 PRESIDING MEMBER LAURIE: But there may
- 3 be a -- a secondary question. They may decide
- 4 where the best place to locate is in order to get
- 5 their product to market, but if one aspect of
- 6 government regulations says no, you can't have it
- 7 there, forcing a certain use into other areas,
- 8 does that make public policy making more complex?
- 9 I'm not trying to put you in a corner. I'm really
- 10 trying to determine whether or not we have a
- 11 public policy issue here. And it's okay if the
- answer is yes, and we -- we have to know that.
- MR. MOORE: Yes.
- 14 (Laughter.)
- PRESIDING MEMBER LAURIE: Thank you,
- sir.
- 17 Commissioner Pernell, did you have any
- 18 questions?
- 19 COMMISSIONER PERNELL: Not at this time,
- 20 no.
- 21 PRESIDING MEMBER LAURIE: Thank you.
- Thank you, Mr. Moore, very much.
- Mr. Tooker.
- MR. TOOKER: Yes. I do have one
- question before we proceed, for Steven.

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That is, based on your presentation, is
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         it correct to assume that providing credits in the
 3
         future through a MERCs program may be more costly
         in -- in five years from now than they are today
         for an existing facility that has a 30 year life
         span?
                   MR. MOORE: I'd say that's an inference,
         yes, you could draw. In general, not necessarily
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 9
         across the board, but in general, yes.
10
                   MR. TOOKER: Because it's a dynamic
11
         process where they need to continue to provide
         those credits over time.
12
                   MR. MOORE: Well, the credits, once
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14
         they're issued under this program, are -- are
         annual credit. It's not like they have to renew
15
16
         them or have to purchase more credits each year.
17
                   PRESIDING MEMBER LAURIE: Mr. Moore,
         you're not being picked up by the microphone.
18
                   MR. MOORE: I'm sorry. The credits are
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20
         -- are given as an annual rate. They're not
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         issued each year. It's not a program, you know,
         there are some programs where each year you have
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         to go out and get additional credits. These
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credits are good for the life of the project,

basically, at the rate of whatever they're issued

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1 at, 100 tons per year, 120 tons per year. So they
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- 2 don't have to, in that sense, go out and renew
- 3 them.
- 4 As far as, for example, the on road
- 5 vehicles go, I said the emission standards above
- 6 which things would be considered surplus are
- 7 dropping, which means it's harder to get a -- the
- 8 same emission reduction. Basically, you would
- 9 have to convert more trucks, probably by 2002,
- 10 maybe two or three times more trucks, which is
- going to add to the cost of any credit that's
- 12 generated that way.
- 13 Marine vessels aren't so clear. I -- I
- don't know of any proposed regulations for
- 15 existing marine vessels. There are regulations on
- 16 the new engines, but they do not apply to any
- 17 existing marine vessels.
- 18 So presumably, in three or four years
- 19 someone could -- could get -- replace a marine
- 20 vessel engine and get credits at not too much more
- 21 cost than it is today.
- MR. TOOKER: Thank you.
- If there are no other questions for Mr.
- Moore, I'd like to offer Duong Nguyen, from EPA,
- an opportunity to make any comments of a generic

1 nature he might want to make, with respect to

- 2 MERCs.
- MR. NGUYEN: Right. Good afternoon.
- I guess I'm slated to speak a few words
- 5 about MERCs from a federal point of view. Since I
- 6 don't have a formal presentation, I'll be brief.
- 7 I just want to emphasize that we
- 8 understand that there are many concerns and issues
- 9 regarding the use of MERCs, and as a result we are
- 10 having internal discussions to discuss the
- 11 viability of -- of these offsets. And also how to
- deal with the concerns and -- and issues
- associated with the use of these offsets.
- 14 The one power plant project where the
- use of MERCs came up in Region 9 so far was the
- 16 project in San Diego, and Mr. Moore has done a
- good job discussing it in some detail, so I'm not
- 18 going to go over it again. But I just want to --
- 19 to say that we agreed to let this project move
- 20 forward only on condition that the project contain
- 21 an array of conditions to ensure that -- that the
- MERC -- the MERCs would meet all the federal
- 23 offset criteria for being surplus, enforceable,
- 24 permanent, et cetera. And that we made sure that
- 25 the project was a narrow -- the scope of the

1 project was narrow and restricted to San Diego

- only.
- 3 MR. TOOKER: I have a follow-up question
- 4 of a generic nature.
- 5 Do you think that the -- the kind of
- 6 strategies developed by San Diego for --
- 7 consistent with their rules and for their program
- 8 would serve as the framework for a discussion by
- 9 EPA and ARB and the districts in California to
- develop more consistent guidelines for MERCs to be
- 11 used on a broader basis?
- 12 MR. NGUYEN: Yes, I -- I thought that
- 13 the framework that was structured for the use of
- MERCs in San Diego was a good one, and I would
- 15 expect that that framework might be used in, you
- 16 know, any future discussion, you know, at EPA, on
- the use of these offsets.
- MR. TOOKER: Thank you.
- 19 PRESIDING MEMBER LAURIE: Mr. Nguyen,
- 20 when the federal government adopts -- when your
- 21 agency adopts rules, do you consider land use
- 22 implications? And let me go back to my earlier
- 23 question. If your rules result in different
- 24 standards for different areas because of the
- 25 unique circumstances of those areas, do you have

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1 an understanding that as a result of those
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- 2 different rules certain land uses may end up in
- 3 one place as opposed to another place?
- 4 MR. NGUYEN: Well, let me just clarify
- 5 that EPA does not make rules to implement the
- 6 Clean Air Act. The districts do. Our job is to
- 7 approve them and do the SIP. And when we do that,
- 8 we -- I don't think we take into account land use
- 9 issues. We thought that -- that's best, you know,
- 10 left to the districts to make that kind of
- 11 decision.
- 12 PRESIDING MEMBER LAURIE: Mr. Nazemi, do
- you care to comment on that question?
- MR. NAZEMI: I think, Commissioner
- 15 Laurie, to answer your question you really have to
- 16 break it down into two questions. And one is, are
- 17 there different requirements for different air
- basins within California or, for that reason,
- 19 nationwide. And the answer is yes, there are
- 20 areas that have more -- dirtier air, they have
- 21 tougher requirements because their job to reach
- clean air under the federal mandate is more
- 23 difficult.
- 24 But then within those air basins, if
- 25 you're now looking at are there policies at the

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1
         local level or federal level that promote or
 2
         discourage building projects in the more populated
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         area versus a less populated area, I think my
         first answer to that is that it's my belief that
         our agency is not a land use agency, so we do not,
         unfortunately, we do not -- or maybe fortunately,
         we do not make the decision where that project
         needs to be sited. Our job is to make sure that
 8
 9
         the proposed project at the proposed site meets
10
         the -- all the requirements associated with air
11
         quality.
                   But I think, you know, simply stated,
12
         the answer to your question is that given that
13
         you're all in the same air basin, the requirements
14
         associated with criteria pollutants are the same.
15
16
         So it really boils down to is your project of a
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         nature that has a localized toxics impact that if
         you're trying to site it in a populated area, the
18
         rules that regulate new sources for toxics
19
20
         emissions prohibit you from complying with the
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         rules, the answer is yes. Our rules does have
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less populated.

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that element that prevents a company that -- or a

project that has a localized risk to be sited in

an area that's more populated than an area that's

1	PRESIDING MEMBER LAURIE: Can you
2	restate that, your last sentence?
3	MR. NAZEMI: If you're siting a project
4	that has a significant risk, toxics risk, I think
5	local districts have a requirement, it's either in
6	the form of a rule or a policy, that's referred to
7	as new source review for toxic sources. And when
8	you look at those requirements, if you are siting
9	in an area where there is more population, in
10	other words, the nearest residence is only a
11	hundred meters away from your site, then you would
12	be subject to a tougher standard compared to when
13	the nearest resident is five miles away.
14	So to that extent, I think there is the
15	local district's rules have an element that
16	encourages siting in a non-populated area. But if
17	the project does not have a significant toxics
18	risk, then that does not become the predominant
19	issue relevant to where the project is being
20	sited.
21	PRESIDING MEMBER LAURIE: Let's assume,
22	for purposes of discussion, that a project has a
23	substantial risk. Are you at least willing to, as
24	an agency, acknowledge that your rules have a land

use impact, even though you don't consider its

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1 jurisdiction, even though you don't consider land
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- 2 use to be your jurisdiction. Do you have an
- 3 understanding that your decisions do have regional
- 4 or statewide land use impacts?
- 5 MR. NAZEMI: Commissioner Laurie, I
- 6 really prefer not to characterize it that way, but
- 7 I would like to characterize it is that our rules
- 8 have requirements that if a risk from a project,
- 9 based on the existing land use, turns out to be
- 10 greater than siting that project in an area that
- 11 based on its existing land use had a lower risk,
- that our rules have that element in them.
- 13 PRESIDING MEMBER LAURIE: Thank you,
- 14 sir.
- 15 Were you done, Mr. Nguyen? Or did I
- 16 interrupt?
- 17 MR. NGUYEN: Yes, I'm -- I'm through.
- 18 PRESIDING MEMBER LAURIE: Thank you very
- 19 much.
- Mr. Maul.
- MR. MAUL: For those in the audience, my
- 22 name is David Maul. I'm the Assistant Division
- Chief here in the division, and Mr. Tooker had to
- leave to go brief somebody across the street, so I
- 25 will take up his place here and hopefully make

- 1 this seamless.
- 2 Mr. Nguyen, thank you much for your
- 3 presentation today. And our next speaker today is
- 4 Gordon Hester, from EPRI.
- 5 Mr. Hester.
- 6 PRESIDING MEMBER LAURIE: Mr. Hester,
- 7 first let me acknowledge, thoroughly appreciated
- 8 your article in the EPRI Journal. Very
- 9 informative. I would encourage all who have not
- 10 read Mr. Hester's article, which was what -- what
- 11 date --
- 12 MR. HESTER: I believe it was the summer
- of last year -- or, no, it was the fall of last
- 14 year. Pardon me.
- 15 PRESIDING MEMBER LAURIE: A couple
- issues ago. Thank you very much, Mr. Hester.
- 17 MR. HESTER: Thank you for that kind
- 18 remark about the article.
- 19 I've been studying emissions trading for
- 20 -- for so long that I can remember when offset --
- 21 when the use of offsets in the Los Angeles Basin
- was considered the big success story of emissions
- trading. Now, of course, the acid rain program is
- 24 typically cited as that success story. But I
- think the use of offsets should still be

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1 recognized as a very significant program with --
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- with substantial social benefits.
- 3 But I'm not really an expert on the
- 4 creation of offsets in California. And the topic
- 5 which I propose to briefly address today, which I
- 6 hope will be of interest to you, is that assuming
- 7 that the Energy Commission, or perhaps the Air
- 8 Resources Board, it's not clear to me from the
- 9 governor's executive order which would have a set
- 10 of essentially banks of emission reduction credits
- 11 that could be used as offsets for new power plants
- in the various air districts, how should a program
- to make those available to power plant developers
- 14 be designed.
- 15 So I will briefly touch on that subject,
- and I'll keep my remarks brief, and perhaps if you
- 17 want me to expand on any of them I'd be happy to
- 18 respond to questions.
- 19 It seems to me that the primary
- 20 considerations for such a program design are the
- 21 objectives of the Energy Commission. The policy
- options that are available to you and the
- incentives that such a program would create for
- power plant developers. With regard to your
- objectives, it seems to me that the primary

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objectives are -- are two. One is the expeditious
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- 2 siting and development of needed electric
- 3 generating capacity, and the second is to avoid
- 4 compromising environmental quality objectives,
- 5 although those are primarily the responsibility of
- 6 other state and district agencies.
- 7 With regard to the objective of
- 8 developing needed generating capacity, the -- the
- 9 primary question I think is how do you determine
- 10 what capacity is most needed, taking into account
- 11 other than environmental considerations. And two
- qualities occur to me as at least potentially
- important ones.
- One is the ability to deliver power
- 15 where need is anticipated. And there's been some
- 16 discussion today of whether it is desirable to
- 17 locate power generation in close proximity to load
- centers, or perhaps to the transmission grid.
- 19 Another potential consideration would be the
- 20 access to the fuel sources on which the plants
- 21 rely, particularly major gas lines, considering
- 22 that new power plants today are -- fossil fired
- plants, at any rate, are typically gas-fired
- 24 plants.
- 25 With regard to the -- to the issue of

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1 proximity to load centers, I think the
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- 2 considerations there, one is the line losses from
- 3 long distance transmission. But in the California
- 4 context, I think that's a very minor
- 5 consideration. It would certainly not amount to
- 6 more than a few percent of losses.
- 7 But the other is having generating
- 8 capacity closer to load centers reduces your
- 9 reliance on the transmission grid and on the
- 10 reliability of the grid, as well as the capacity
- of the grid.
- 12 The second consideration seems to me to
- 13 be the question of the ability to deliver power
- 14 when it is needed. And it seems that the most
- 15 pressing need will be during summer peaking
- 16 periods. There may be seasonal constraints on gas
- 17 delivery, though I would think that those would be
- 18 least highest in the -- in the summertime, so it
- 19 probably would not be a consideration. And in
- 20 general, I would consider the question of when
- 21 delivery can be provided to be a lesser one than
- where it can be provided.
- 23 As far as the objective of not
- 24 compromising environmental quality, I -- I had
- 25 intended to observe that if -- if qualifying

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emission reduction credits for offsets, by which I
mean surplus, enforceable, et cetera, are obtained
in the ratios required by the air districts, given
that the air districts set those ratios with
consideration of an adequate margin of safety to
avoid compromising air quality, then really
environmental quality objectives should not be
compromised, and shouldn't have to be a big
consideration.
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On the other hand, Mr. Tooker's comment this morning that most projects do require additional mitigation causes me to think twice about that. Perhaps that is not true, although I'm not aware specifically of the nature of the mitigation to which he was referring.

Nonetheless, the CEC would probably want to encourage development of power plants with lower emission rates, both as a matter of good public policy and also to avoid diminishing the supply of offsets available both to support other generating plants, and, as was alluded to in some comments this morning, to support other economic development opportunities. So obviously, the lower emission rates are, the fewer offsets you will have to use up, and the more offsets will be

1 available for other power plants or other

- 2 purposes.
- 3 PRESIDING MEMBER LAURIE: To what extent
- 4 are you familiar with CEQA?
- 5 MR. HESTER: Only passingly.
- 6 PRESIDING MEMBER LAURIE: Okay. I won't
- 7 ask the question.
- 8 MR. HESTER: Okay. Thank you.
- 9 As far as the policy options available
- 10 to you for achieving these objectives, I clearly
- -- clearly, one of the options is simply whether
- to make offsets available to -- for power plant
- development or not. But that's a very blunt
- instrument, and I think you would prefer a more
- 15 precise one.
- 16 It appears to me that the executive
- 17 order that the governor recently issued provides
- some latitude for varying the price at which
- 19 offsets are available. And that might provide the
- 20 policy leverage, if you will, that you might
- 21 require. I'm referring to the language in the
- 22 executive order that says credit shall be provided
- to facilities at up to the market rate for offsets
- or emission reduction credits, and that where
- 25 power will be sold under contract to the

1 Department of Water Resources, that offsets may be

- 2 provided at up to a 50 percent discount relative
- 3 to the market rate.
- 4 So there appears to be some latitude
- here to adjust the price of offsets as a means of
- 6 encouraging the development of facilities when and
- 7 where you deem them most valuable.
- 8 I think that these prices for offsets,
- 9 assuming that they can be varied, could be based
- in part clearly on the market price in a given
- 11 district or region, and as we saw this morning,
- 12 those market prices can vary very widely. But you
- 13 could also base them on your determination of the
- 14 need for capacity in different areas and at
- 15 different time periods. And, finally, that they
- 16 could be based on emission rates. That is, that
- 17 there could be a different price set on offsets
- 18 provided to facilities depending on, for example,
- 19 the number of pounds of emissions per megawatt
- 20 hour that were produced by that facility, given
- 21 its fuel use, its emission controls, and the
- generating technology, and so forth. And
- obviously, the direction to go would be to set
- lower prices for lower emission rates.
- 25 As far as considering the incentives for

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1 power plant developers and operators that such
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- 2 policies might create, obviously the price of
- 3 offsets itself would -- would be the primary
- 4 determinant of those incentives. Developers would
- 5 tend to go where offsets were available at a lower
- 6 price, just as they are today, where prices are
- 7 determined entirely by the market.
- 8 Another very important issue, though, I
- 9 think, and we've seen this throughout the history
- 10 of emission trading, is that certainty is really a
- 11 big issue for -- for a plant operator, preferably
- 12 certainty at a known price, but certainty that
- offsets will -- will simply be available, period,
- is going to be very important. And -- and the
- 15 best way to assure that certainty is to establish
- 16 clear rules as quickly as possible that would then
- be applied uniformly.
- 18 PRESIDING MEMBER LAURIE: Let me ask you
- 19 a question about that. And you may not be able to
- 20 respond, but I'm interested also in the views of
- others.
- 22 If -- if you have a limited number of
- offsets available, and as a result it's first come
- first served, regardless of what the use is,
- 25 whether it's a power plant or some kind of

1 manufacturing plant, or any other substantial

- 2 polluter. Should there be a rule which
- 3 prioritizes the use based upon other requirements,
- 4 based upon local land use requirements, based upon
- 5 state requirements. Should there be a priority
- 6 given to power plants over a tire manufacturer, or
- 7 a bicycle manufacturer. Because that is not
- 8 currently what is occurring. Do you have any
- 9 views on that?
- 10 MR. HESTER: Well, I think given the
- 11 governor's recent executive order, there -- there
- evidently is a need to set a priority on the
- development of power plants as a use of offsets.
- 14 It seems to me the governor has, in effect, for
- the time being, at any rate, made that
- determination.
- 17 And I think one could argue that the
- 18 provision of electricity is -- is so basic an
- 19 economic need that it should be accorded priority.
- 20 In that you -- and if you don't have the electric
- 21 generating capacity, you -- you need that to
- support the other sort of uses to which you
- referred, for a tire plant or whatever it may be.
- 24 PRESIDING MEMBER LAURIE: Okay. Mr.
- 25 Nazemi?

1 MR. NAZEMI: Commissioner Laurie, I

- 2 think the answer is yes, and there already exists
- 3 such a mechanism in local rules. I mentioned
- 4 earlier that rather than prioritize the
- 5 availability of offsets, what we have in our rule
- is what we call an exemption, or what we refer to
- 7 as a priority reserve, where under public policy
- 8 we establish that certain projects, such as
- 9 essential public services, such as federally or
- 10 state mandated programs, reformulated gasoline,
- 11 and so on, do deserve to have the first cut.
- 12 That's basically bottom line, is they get a first
- cut by being exempt from having to provide any
- 14 offsets. And --
- 15 PRESIDING MEMBER LAURIE: You don't
- 16 consider local general plans, or anything like
- that, in developing those priorities.
- 18 MR. NAZEMI: That's correct. We don't
- 19 consider those. But there is some -- at least
- some policy in place that provides some
- 21 prioritization on who should have the first cut at
- the offsets.
- PRESIDING MEMBER LAURIE: Very good.
- 24 Thank you, sir.
- Sorry to interrupt, Mr. Hester.

1 MR. HESTER: Quite all right.

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One other point about the incentives 2 3 created for developers and operators, and that is that you obviously want to avoid creating an incentive for plants to emit at higher rates than they otherwise would. And insofar as you're using adjustments in offset prices to provide incentives to build needed capacity, you need to make sure 9 that you avoid setting that price below the 10 marginal cost of emission controls. And linking 11 the offset price to emission rates is one possible mechanism for -- for accomplishing this. 12

And then a final point about this sort of program, in general. It seems obvious to say that you should keep these programs as simple as possible. But I can assure you that you will be urged by many parties to try and use these programs not to achieve the central or primary objectives of the programs, but also to achieve other -- other objectives. For example, to make up for perceived shortfalls in the -- in the effectiveness of environmental programs.

The history of emission trading is really rife with examples of how the perfect has been made the enemy of the good, resulting in

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1 programs with so many extra requirements and hoops
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- 2 to jump through to make sure that no one takes
- 3 undue advantage or -- or nothing could possibly
- 4 happen to -- to make matters worse in one specific
- 5 location, that it has very frequently in the past
- 6 been the case that emission sources find it much
- 7 easier not to utilize these trading programs at
- 8 all, but rather to simply comply with conventional
- 9 requirements and be done with it. And that is a
- 10 situation that I urge you to avoid.
- 11 PRESIDING MEMBER LAURIE: Thank you,
- 12 sir.
- 13 Do you have any thought or comment on
- the nexus between air emission standards,
- 15 California or elsewhere, and overall electric
- supply capability?
- 17 MR. HESTER: I'm not certain that I
- understand what you're getting at.
- 19 PRESIDING MEMBER LAURIE: How do air
- 20 emission standards impact the ability to provide
- 21 electric power?
- MR. HESTER: Well, I certainly would not
- go so far as to say that air emission standards
- 24 prevent us from being capable of supplying
- 25 electric power. But it is clear that they -- they

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strongly influence the form in which capacity is

provided. I think that we're seeing, not just in

California, where this has probably been the case

for some time now, but -- but nationwide, that air

emission standards are -- are driving new capacity

to be pretty much exclusively gas-fired, except

insofar as biomass and wind resources are -- are
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insofar as biomass and wind resources are -- are
being developed, which is certainly positive
development.

But I think we need to be aware of where I think we're seeing some of the effects of that concentration on one fuel source for electric generation being reflected in the gas markets today. And that is certainly something that needs to be anticipated, and while I would not go so far as to say that it requires adjusting our objectives for air quality, I think we need to be careful about how we implement programs to achieve those objectives and the schedule on which we -- we move toward them and consider them to be feasible to achieve them.

PRESIDING MEMBER LAURIE: Thank you,
sir, very much.

24 COMMISSIONER PERNELL: I have a quick
25 question, and that is, you mentioned the fuel

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source, and given at least what I know about fuel,
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- 2 that natural gas is one of the cleaner fuels in
- 3 terms of these plants. Short of nuclear, do you
- 4 have any other suggestions as to a fuel source?
- 5 MR. HESTER: Well, I -- I mentioned wind
- 6 and biomass a moment ago. I think --
- 7 COMMISSIONER PERNELL: And air -- well,
- 8 not biomass, but wind is certainly geographically
- 9 restricted.
- 10 MR. HESTER: Geographically restricted,
- 11 and also restricted in its ability to provide
- 12 capacity when -- when needed. Obviously, you can
- only run a wind plant when the wind is blowing.
- 14 And there are similar limits that apply to solar,
- 15 though I think it's some ways away from being
- 16 commercially viable on a large scale in any case.
- 17 But no, I don't really -- gas is clearly
- the cleanest electric generating fuel by far, at
- 19 this point, and no, I don't have any alternatives
- 20 to recommend in the short term. I hope in the
- 21 longer term to see us develop much cleaner ways to
- use coal, because it's a -- it's an abundant
- resource. But I think in the short term, we're
- going to -- our dependence on gas is -- can be
- 25 expected to continue.

1 COMMISSIONER PERNELL: And then, this

- 2 might be a little unfair to ask --
- 3 PRESIDING MEMBER LAURIE: That never
- 4 stopped you in the past, Commissioner Pernell. Go
- 5 ahead.
- 6 (Laughter.)
- 7 COMMISSIONER PERNELL: But if you had --
- 8 you've heard of San Diego's offset program, and if
- 9 you had an opportunity to design one yourself,
- 10 would it just be the air emissions versus whatever
- 11 pollutants, or would you look at a more holistic
- process which, let's say, would include where the
- 13 plant's located, the demographics, and other
- issues that have come before us as we're licensing
- 15 plants?
- 16 MR. HESTER: Uh-huh. I think this goes
- 17 back to the -- to the last remark I made about --
- 18 about keeping things simple and not letting the
- 19 perfect be the enemy of the best.
- 20 COMMISSIONER PERNELL: Well, that's why
- 21 I was a little reluctant to ask the question.
- MR. HESTER: I think once you begin
- folding a lot more objectives into a program, you
- 24 -- you really jeopardize its viability by -- by
- just making it so complex that the people will

1 look for opportunities to avoid it, rather than to

- 2 take advantage of it.
- 3 COMMISSIONER PERNELL: Okay.
- 4 PRESIDING MEMBER LAURIE: If -- I'm
- 5 sorry, Commissioner Pernell, did you have anymore?
- 6 COMMISSIONER PERNELL: No. Well, let me
- 7 just ask the question for the rest of the panel,
- 8 in terms of fuel sources. Not renewable, but a
- 9 fuel source for -- for -- as a fuel for these --
- 10 for the plants, in terms of generation. Any
- 11 ideas?
- 12 MR. NAZEMI: Commissioner Pernell, we
- 13 have been recently approached by a company who
- 14 wanted to utilize ethanol as a fuel to generate
- 15 three and a half megawatt of energy. And I think
- 16 we certainly promote the use of ethanol over
- 17 diesel in any case that we can. But I think that
- 18 might be a viable solution if the NOx emissions
- 19 could be equated to natural gas. At this time I
- think they're somewhat higher than natural gas.
- 21 MR. MOORE: I guess from San Diego's
- point of view, definitely natural gas is our
- 23 preferred fuel at this point. There's nothing
- that really comes close to it.
- 25 COMMISSIONER PERNELL: And that seems to

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1 be the opinion of most of the generators.
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- 2 MR. TALWAR: The only other thing I will
- 3 add, we make and manufacture bio-diesel. Bio-
- diesel is -- sorry, it's a bio-diesel call.
- 5 (Laughter.)
- 6 MR. TALWAR: We make bio-diesel from the
- 7 melt down grease and what-not. Also, we make bio-
- 8 diesel from virgin vegetable oils. We have a
- 9 plant in Florida, and we are looking to put two
- 10 plants here in California, a plant in Arkansas and
- 11 a plant in Dallas.
- So we should have plenty of capacity
- available, hopefully by the middle of next year,
- but it won't be enough to power 3,000, 4,000
- 15 megawatt. We may be having enough for maybe
- seven, 800 megawatt in the end.
- 17 COMMISSIONER PERNELL: Now, the bio-
- diesel is also made, a certain percentage is
- 19 ethanol? Is --
- MR. TALWAR: No. Bio-diesel is
- 21 basically made from recycled cooking oil, and also
- 22 soybean oil. The conversion process can use
- 23 methanol as a chemical for chemical reaction, but
- there is no ethanol involved in it otherwise, as a
- 25 raw material.

1	COMMISSIONER PERNELL: Okay. I'm
2	getting a little bit off the subject here, but in
3	terms of distributed generation, would that be an
4	application?
5	MR. TALWAR: Very much so. We
6	COMMISSIONER PERNELL: Where you got
7	small smaller turbines or or diesel engines?
8	MR. TALWAR: Very much so. Bio-diesel
9	is has got no sulfur, no ash, behaves just like
10	natural gas. All the controls that are applicable
11	to natural gas are equally applicable to bio-
12	diesel. So it definitely will be a source for
13	in those kinds of smaller power generating system.
14	COMMISSIONER PERNELL: Thank you.
15	PRESIDING MEMBER LAURIE: While we're on
16	the subject, and and I appreciate Commissioner
17	Pernell's question. If, again, for purposes of
18	discussion, as a matter of public policy assume
19	it's a bad idea to have a single source fuel,
20	reliability on a single source fuel. For purposes
21	of discussion. And assume again short to mid-
22	term, five to to ten years. In order to meet
23	California standards, how or where can technology
24	be improved to meet those standards with a fuel
25	other than gas? Is there any way for coal to meet

1 California standards, given what's expected to be

- 2 current coal technology over the next decade.
- 3 Anybody know?
- 4 No. Okay. Thank you, Mr. Hester.
- 5 Mr. Maul.
- 6 MR. MAUL: Mr. Hester, just ask you a
- 7 quick question before you -- given your long term
- 8 participation in the trading market and analyzing
- 9 this not only for California but elsewhere, that
- 10 could put you in a nice position to kind of look
- 11 to the future, particularly over the next three to
- 12 five years. Do you have any insights you want to
- offer us to the viability of the offset trading
- 14 market or offset availability in general, not only
- in the next six months, but looking out farther
- 16 two, three, five, ten years down the road?
- 17 MR. HESTER: Well, I -- really nothing
- 18 beyond the fact that I think that the discussion
- 19 that's being held this afternoon of innovative
- 20 ways to create offsets and possibilities such as
- 21 intersector trading between mobile and stationary
- 22 sources, I think will become increasingly
- important. We've largely controlled stationary
- sources in this country to such an extent, and
- obviously that applies to California, as well,

1 even more so, if anything, that I think it's going

- 2 to be increasingly difficult to create credits for
- 3 use as offsets from mobile -- stationary sources.
- 4 And it will become necessary to look to other
- 5 source categories.
- MR. MAUL: Thank you.
- 7 Mr. Hester, thank you much for your
- 8 presentation today.
- 9 Our next speaker is Mahesh Talwar, from
- 10 OceanAir. And Mahesh, I believe you have a power
- 11 point presentation you want to provide?
- MR. TALWAR: Yes, I do. Let's see if
- it's going to work today.
- MR. MAUL: Okay. Check on our high tech
- 15 equipment here. Thank you very much for coming
- 16 today.
- 17 MR. TALWAR: Good afternoon. My name is
- 18 Mahesh Talwar. I am president of OceanAir
- 19 Environmental. As you heard me before, we also
- 20 own a bio-diesel manufacturing facility. Besides
- 21 that, we have been in the emission trading and
- 22 emission reduction credit creation business, as
- well.
- 24 We started our business in emission
- 25 reduction credit creation business back in 1991.

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1 That was started in Santa Barbara when I was
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- working there for a government agency. Santa
- 3 Barbara had seen the largest offshore oil
- 4 development, and just like you're seeing today the
- 5 largest power plant boom, Santa Barbara faced
- 6 similar kinds of problems. So they had to look at
- 7 ways to innovatively and creatively get emission
- 8 reduction credits.
- 9 That's when the whole concept we began
- of doing the repowers on marine vessels, doing the
- 11 repowers on agriculture pumping engines. So we're
- somewhat proud that we started the program in the
- 13 state. We were the first one to do that.
- 14 Initially went through pilot stages, then went
- 15 through a fully successful program. That was done
- 16 initially for CEQA mitigation.
- Now, I want to make sure we understand,
- 18 the CEQA mitigation was this new source review
- 19 mitigation. New source review, we have to comply
- with the requirement of real, surplus,
- 21 quantifiable, permanent, enforceable, and what-
- 22 not, which are really strict requirements in the
- 23 federal rule. There is not much leeway the local
- 24 air districts would have.
- 25 In CEQA mitigation, it's subject to

1 interpretation. Policy makers can choose whatever

- way they want to implement. It's a very
- 3 discretionary process.
- 4 Give an example. You may have a 6,000
- 5 homes tract here. You think the provide offsets
- for all the emissions they are causing from
- 7 construction of those homes, or activity of
- 8 people, some driving cars. No. What they do in
- 9 CEQA analysis of those kinds of construction
- 10 projects is look at the ways to minimize the air
- 11 pollution impact from technological ways going in.
- 12 There are no offsets requirements or mitigation
- 13 requirements beyond that.
- Now, the project remains somewhat, you
- 15 know, the findings may be -- you will end up with
- 16 a staff recommendation that the policy makers have
- 17 to have an overriding concern, per se, and still
- approve the project, per se.
- 19 Having said that, CEQA therefore
- 20 provides a lot of latitude and flexibility and
- 21 very innovative ways you can either choose not to
- do it, or if you do it, you have a lot of
- flexibilities, but I wanted to convey this
- 24 message.
- Next, let me begin by saying that we

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1 have been on the other wise as far as creating
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- 2 these, and we are seeing the real life situations,
- 3 problems, and found solutions. It's easier to
- 4 talk sitting here that you may have heard from
- 5 various speakers here is the programs out there
- 6 where you can create mobile source emission
- 7 credits, or innovative ways you can create
- 8 emission reduction credits. But in practical
- 9 life, it is very, very tough.
- 10 You heard from San Diego, my friend
- 11 here, Steven Moore, I was the first one to
- 12 approach him back about -- what is it, Steven, two
- and a half years ago?
- MR. MOORE: At least, yeah.
- 15 MR. TALWAR: Two and a half years ago we
- 16 went to him and said, okay, we want to do a marine
- 17 vessel in San Diego for a potential power plant,
- 18 which was not even built at that point in time.
- 19 And to their credit, they were very supportive of
- our concept, but it took two and a half years,
- 21 various trips to agency, a lot of money. And to
- 22 CARB and EPA. But I'm glad to see that program
- come to fruition today.
- 24 The basic message is it does take time
- and money. Don't expect magic solutions within

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1 six months. The regulatory barriers are
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- 2 tremendous. New concepts, everybody still has to
- 3 review those and it takes time. So keep that in
- 4 mind when you are looking at new and innovative
- 5 solutions.
- Next, we have competition. The
- 7 government is trying to approach the same sort of
- 8 unpermitted sources which we are discussing here.
- 9 Ag pumping engines, marine vessels, on road
- 10 trucks, buses. Government has got more money than
- 11 private sources, believe me. Government has put
- 12 in under Carl Moyer program close to about -- I --
- my numbers are correct -- 70, \$80 million in Carl
- Moyer program.
- Then there is an AB 2766 program, which
- 16 has got about 70, \$80 million. Then there are a
- 17 couple other. Sacramento's got some special
- 18 provisions. They got \$50 million plus.
- 19 Where does all this money go? None of
- this money ever goes to cleaning up stationary
- 21 sources. It goes to -- it goes as a government
- incentive grants for cleaning up unpermitted
- 23 sources. So private industry is going to face
- 24 tremendous amount of competition from free
- 25 government handouts. If I am operating a fleet of

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1 trucks and I get government grant, which has got
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- 2 almost no strings attached, and now I can operate
- 3 fleet of natural gas buses, and then, on the other
- 4 hand, the private industry power plant comes in
- 5 trying to do the same thing, they have a
- 6 tremendous record keeping requirement, you know
- 7 which path I am going to choose.
- 8 So there are some competing forces,
- 9 private forces, government, that's out there. So
- 10 let's keep that in mind, as well.
- 11 You have to do that manually there.
- 12 The next one.
- Now, under the new source review rule,
- 14 that's when I talked about the traditional source
- of offsets. Most of the time you end up requiring
- 16 offsets for NOx, PM10, and VOC. NOx and VOC,
- 17 generally speaking, we start -- when you started
- 18 four years ago, the banks are rich. San Joaquin
- 19 had the biggest bank in the world, for example.
- 20 And I know of one power plant company that located
- 21 in San Joaquin with the intention they wanted to
- 22 bring power into South Coast, or Los Angeles
- 23 Basin, because the offsets were there. So there
- had been some discussion, yes, there had been
- 25 company that -- at least they have told me the

1 reason they are located in the region is because

- the offsets were available.
- 3 But today, what we are looking at, the
- 4 banks are pretty much gone. Gone by -- by the
- 5 fact that most have been grabbed up and taken up
- 6 by power plants. When the banks are gone, then
- 7 what do you do? And that's when we start looking
- 8 at the innovative -- innovative solutions to all
- 9 these -- all these situations.
- 10 Innovative solutions, when you talk
- 11 about, let's look at some CEQA side -- side of it,
- 12 too. I think there was some discussion earlier
- 13 this morning about CEQA mitigation, and there was
- an example given for San Diego where the power
- 15 plant company there has proposed to pay into a
- 16 Carl Moyer fund at the air quality management
- 17 district. That fund, the district is going to use
- 18 to augment their existing fund they get from the
- 19 state. Therefore, they did not have to go and
- 20 obtain PM10 offsets, which were not required by
- 21 the local air district, but they were required
- 22 under CEQA mitigation.
- 23 So those kinds of things are going to be
- very, very helpful. We have also spend
- 25 considerable time in looking at the agriculture

1 pumping engine, for example. Situation we faced

- 2 here, they are unpermitted sources. Each and
- 3 every air district has got different sets of
- 4 requirement how to deal with unpermitted sources.
- 5 Some districts have this thing in the rules that
- 6 they will allow offsets to be created from
- 7 unpermitted sources for NSS, new source review or
- 8 stationary source use. Some districts don't, and
- 9 they have to go back and modify their rules, and
- 10 modification of rule can take maybe a year or two
- 11 year or longer process.
- The changes to the San Joaquin new
- source review rule that have been going on for two
- 14 and a half years, still not done, which will allow
- 15 the use of so-called fourth quarter PM10 from
- 16 cotton gins to be used across all quarters. Now,
- 17 that is good for power plants, because they need
- 18 PM10, and PM10 are plentiful in the fourth quarter
- 19 from cotton gins.
- 20 But the regulatory process itself is a
- 21 very long and tedious process to get changes
- 22 approved within the existing framework of the
- 23 rules.
- 24 So basically -- let me just sum it up.
- In terms of recommendations, where we think we can

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1 have a good nexus between what you are all trying
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- 2 to achieve and still not degrade the air quality,
- 3 I got couple of recommendations in that.
- 4 One, I understand that there may be
- 5 situations because of public pressure, you know,
- 6 public may want to see some mitigation for so-
- 7 called unmitigated impacts from -- under CEQA.
- 8 Under those kinds of scenarios, we strongly
- 9 recommend to look at not only -- to not
- 10 necessarily look at -- let's say, give an example,
- 11 PM10, for PM10.
- 12 Look for broader scope, like doing some
- 13 -- encouraging repower with alternative fuel.
- 14 Garbage truck fleet, for example, which have got
- 15 diesel toxic reductions. So something more global
- 16 that can be achieved under CEQA, or pay into
- 17 existing air quality fund which is already
- 18 established, managed very well by the air
- 19 districts. So that's -- that's one angle
- definitely to be looked at.
- 21 The second thing, we strongly support
- the new bill that's being discussed where all the
- government money that's available, which now is
- creating competing interest against the power
- 25 plants and offsets availability, there has to be

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1 some sort of a nexus where emission reduction
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- 2 credits from various projects can be put into some
- 3 sort of a bank to be used exclusively for power
- 4 plants development, so we don't end up competing
- for the same resources and pool.
- 6 Lastly, I would say that there has to be
- 7 some sort of a encouragement or incentive, or
- 8 whatever way you can create that incentive, for
- 9 the use of renewable fuel, like bio-diesel,
- 10 ethanol, or something else to create an
- 11 alternative to natural gas. In Europe they are
- looking at putting in close to about 40,000
- 13 megawatts using bio-diesel produced from soybean
- oil. This country produces enough soybean oil to
- power at least 80,000 megawatts, if all the
- 16 soybean oil was indeed used, but there has been no
- 17 market for it, and therefore there has been no
- 18 encouragement.
- 19 Technology exists today, given the
- 20 proper policy push, and the plants can be
- 21 installed within the next I would say two to three
- years timeframe.
- Thank you.
- 24 PRESIDING MEMBER LAURIE: Thank you, Mr.
- Talwar. Thank you, sir, very much.

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1 Mr. Maul.
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- 2 MR. MAUL: Just a quick question for
- 3 you, Mr. Talwar.
- 4 You had mentioned that the regulatory
- 5 process for new kind of rules like this is
- 6 somewhat difficult. Can you offer some
- 7 suggestions on how to make the regulatory process
- 8 more efficient or effective in considering things
- 9 that it doesn't normally consider, innovative
- 10 approaches, new rules, new fuels, new
- 11 technologies?
- 12 MR. TALWAR: I think my only suggestion,
- 13 being an ex-regulator myself, is to kind of get an
- 14 early consensus with all the stakeholders in the
- 15 same room, rather than trying to pass the rule,
- 16 then send it to EPA, CARB, for their review, and,
- 17 you know, get everybody on board and get a time
- 18 consensus.
- 19 The other suggestion I had was to do it
- 20 through the legislative process and put a
- timeframe to it.
- 22 MR. MAUL: All right. Thank you much
- for you presentation.
- 24 Our next speaker here is Ken Lim from
- 25 the Bay Area Air Quality Management District, and

1 Ken has a few insights he'd like to offer on

- 2 offset availability in the Bay Area.
- 3 PRESIDING MEMBER LAURIE: Afternoon, Mr.
- 4 Lim. Some of our other speakers have been before.
- 5 We're going to ask you to get very close to the
- 6 microphone, otherwise you won't be picked up.
- 7 MR. LIM: Thank you, Commissioner.
- 8 My name is Kenneth Lim. I'm with the
- 9 Bay Area Air Quality Management District. I was a
- last minute addition to the panel here, so I
- 11 didn't come --
- 12 PRESIDING MEMBER LAURIE: We're happy to
- have you.
- MR. LIM: -- I didn't come prepared with
- 15 remarks in advance. I just came actually from
- 16 another ongoing meeting at the Air Resources
- 17 Board, and so I don't have the luxury of knowing
- 18 what was stated earlier.
- But I'll just add a few comments, and --
- 20 COMMISSIONER PERNELL: Just a second.
- 21 (Inaudible asides.)
- MR. LIM: Okay. I just had a few
- comments based on the few minutes I've heard, and
- 24 I'm sure my colleagues in the other air districts
- 25 have already made similar comments.

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1
                   The Bay Area itself, as far as
         availability of offsets for power plants, or
 2
         whatever new facility, on the books, so to speak,
 3
         quite a few, I believe more than adequate for
         nitrogen oxide, which is the primary pollutant
         ozone precursor from power plants, as well as VOC
         emissions credits availability.
                   The question, though, is, I think,
 9
         availability as far as price. We have seen,
10
         because of the demand and new plants, including
11
         power plants, the price being bid up. In recent
         years NOx credits were in the range of six to
12
         $10,000 per ton. And recent sales figures
13
         indicate as high as over $20,000 per ton. So when
14
         there are remarks heard that there's a shortage of
15
16
         offsets, I think it might be qualified as a
17
         shortage of offsets at the desired price.
18
                   On the other pollutants, PM --
19
                   COMMISSIONER PERNELL: On that -- I'm
         sorry. Is there -- and you represent the San
20
         Francisco Air Quality District?
21
                   MR. LIM: That's correct.
22
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there, it's just a matter of price?

23

24

25

COMMISSIONER PERNELL: And -- and is it

your assertion that there's no shortage of offsets

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MR. LIM: That's -- that's not -- the
 1
 2
         price is obviously not a small matter, but
 3
         currently in our bank we have something on the
         order of over 2500 tons of NOx emissions, and a
         typical large central power plant, say in the 500
         megawatt range, well controlled, meeting the
         standards, would require only about a hundred
         tons. And we have about 2500 tons or more in --
 9
         in the bank.
10
                   But getting the holders of these credits
11
         to sell is another matter. Everything has a
         price, and unfortunately the price has gone up
12
         considerably.
13
                   On the other hand, PM10 emission, there,
14
         there's not an abundance of credits, and I \operatorname{\mathsf{--}} I
15
16
         believe it's the same situation in other air
17
         districts.
18
                   As far as our rules in our district,
         however, most of these plants would not trigger
19
         the PM10 offset requirement, so that in general
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21
         would not be an impediment. However, as discussed
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concern on the CEQA, where a specific location or
a specific facility may need some mitigation
measures as far as PM10 offsets.

22

I think earlier, there might be specific cases of

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PRESIDING MEMBER LAURIE: Do you concur
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         that we don't know, in any given district, what a
 2
         reasonable -- what an acceptable price, or what a
 3
         desirable price might be. That is, we heard the
         representative from Calpine this morning, and what
         he said, which I -- I think is natural when a
         developer goes in and they have a choice of where
         in the state, if at all, they're going to seek to
 9
         site a power plant, they'll put up a matrix. And
         the matrix will have air and water and local
10
11
         issues, and this and that and this and that.
         Price and availability of offsets will be one of
12
         those factors.
13
                   Given the fact that a merchant plant is
14
         not required to locate in any given area, would it
15
16
         be correct to say that even though on the books
17
         there may be an appearance of availability, if the
         price is sufficiently non-desirable it is the
18
         equivalent of being non-available because a
19
         developer will go elsewhere.
20
21
                   MR. LIM: Certainly the price, if it's
         sufficiently high, would be an impediment, and
22
         perhaps a severe impediment to choosing that
23
         location. But I think the overall demand, and
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2.5
         even the price that electricity can demand has
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1 changed markedly in recent years and recent
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- 2 months, or days, even, perhaps. So such that on -
- 3 relative to the price of electricity,
- 4 particularly for a merchant plant that may be able
- 5 to sell at a rather commanding price, the price of
- 6 the offsets itself may be an overall very small
- 7 fraction of the entire cost.
- 8 PRESIDING MEMBER LAURIE: I don't know
- 9 what that answer is.
- 10 MR. LIM: And I think I would -- without
- 11 knowing the details right now, I would venture
- 12 that the price of offsets themself can be made up
- 13 very quickly, in a matter of perhaps months in the
- 14 lifetime of a plant. So I don't think that is the
- single impediment that is a general case.
- 16 However, I'm a firm believer in the free
- 17 market system, where there is true flexibility and
- 18 true availability, so that they can choose an
- 19 alternative site where the availability would be
- 20 more attractive.
- 21 I was going to continue on that there
- 22 might be a silver lining in the cost of the rise
- in offsets, not that we're encouraging the
- 24 shortage, but there could be other facts or silver
- linings.

1	For example, if the price is
2	sufficiently high for offsets, that would actually
3	encourage companies to pursue the creation of new
4	offsets in an open market system, where before,
5	when there was \$5,000 per ton, there wasn't that
6	incentive. The emission reduction has to be real,
7	they might be quantifiable, the local bureaucratic
8	air agency may require permit conditions, record
9	keeping, all kinds of reasons why a company would
10	not want to voluntarily reduce emissions in
11	exchange for credits.
12	But given that that price has gone up
13	two times, three times, four times, they may be
14	willing to pursue alternatives or other perhaps
15	even advanced technologies for reducing emissions
16	beyond regulatory requirements.
17	That's one silver lining.
18	Another silver lining may be that the
19	new plants that are in the process of applying for
20	a permit would be encouraged to apply the latest
21	control technology. In other words, advancing the
22	technological frontiers of the best available

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control technology, because knowing that, if they

they're lowering net emissions from that plant and

voluntarily take lower emissions, the result is

23

therefore they would actually require less

- 2 offsets.
- In other words, given the price of
- 4 offsets is the highest barrier, then they will
- 5 reduce emissions. And historically, that's what
- 6 we've found. Over the last ten years, these power
- 7 plant proposals that come in our door, year by
- 8 year, almost every other year, they voluntarily
- 9 come down. In fact, many of our BACTT
- 10 determinations, B-A-C-T-T, contrary to public
- 11 perception, was not the air district cracking
- 12 down. Last year, you -- your counterpart came in
- 13 with a power plant proposal of ten ppm, this year
- 14 the air district was -- we rarely do that in the
- 15 case of combustion systems. But typical power
- 16 plants, or even smaller scale, even in smaller
- 17 industrial boilers, it's the technology. They
- voluntarily come in, often for the purpose of
- 19 avoiding offsets, or minimizing the offsets that
- 20 it provides.
- 21 So that, say ten years ago, emission
- levels were in the 20, 30 ppm level. And now,
- we're talking about two and a half ppm. And I
- 24 would wager that it wasn't because the air
- districts were pushing it. It really was the

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1 offsets driving it. And I think that's a
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- 2 forgotten point.
- 3 Many of the air district, including us,
- 4 we have attempted to help out small facilities,
- 5 including small generation sources, in obtaining
- 6 these offsets, recognizing that their own
- 7 resources may not be as robust. And we have
- 8 what's called a small facilities bank that we've
- 9 created. These are available for emissions of
- 10 VOCs, organic compounds, and nitrogen oxides, for
- 11 facilities that have the potential to emit of less
- 12 than 50 tons per year. We've had this offset bank
- for six or seven years, I think rather
- 14 successfully.
- 15 Unfortunately, with the expansion in the
- 16 economy, especially obviously in the Bay Area, new
- 17 facilities come in, they have tended to drain the
- 18 available credits from these offsets. So now that
- 19 some of these smaller peaker plants come in, we're
- 20 about to tell them that what was available a year
- ago, two years, three years ago, is nearly drying
- 22 the well. So that is of serious concern to us,
- 23 because on the short term these peaker powers may
- 24 help us through the coming summer, and we're
- working with them to see what ways we can do that.

1 But we're also encourage by the fact

- 2 that we're getting a lot more inquiries from
- 3 consultants, and even private companies that --
- 4 asking how do they generate credits, in a -- at
- 5 this point, in a conceptual discussion. But these
- 6 are frequent conversations, and these are
- 7 conversations we didn't have even six months ago
- 8 or a year ago. So that is encouraging.
- 9 PRESIDING MEMBER LAURIE: Thank you very
- 10 much.
- 11 Ms. Townsend-Smith.
- 12 MS. TOWNSEND-SMITH: I'm curious, now.
- 13 I like your analogy of using a silver lining. But
- 14 I'm curious if South Coast Air Quality Management
- 15 District has experienced some of the same things
- 16 you've experienced, in terms of facilities
- 17 actually coming in and reducing their air
- 18 emissions also. You said that's a trend now in
- 19 the Bay Area?
- 20 MR. LIM: I want to clarify that. They
- 21 have not actually done this, but they are in the
- 22 conceptual stage of talking to us, asking how it
- can be done, and they are going back to their own
- 24 management, see if that's a viable path that they
- 25 want to pursue. They haven't formally requested

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1 such a path, but the discussions are there.
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- 2 MR. NAZEMI: I guess I can address that
- 3 in two ways. One is are the new facilities coming
- 4 in at lower and lower levels, and the answer is
- 5 yes. And maybe a good comparison between Bay Area
- and South Coast is Ken just mentioned the small
- 7 source offset bank is at 50 tons. Our small
- 8 source offset bank is four tons, and that's
- 9 because of the -- the extreme non-attainment area
- we're in.
- 11 But as far as existing sources that want
- 12 to reduce their emissions, I think that begs the
- 13 question again to talk about these acronyms that I
- 14 hate to throw out again, but RACT and BACT
- 15 discounts. When a facility tries to control their
- 16 emissions, if they have to discount it by RACT or
- 17 by BACT, that's retrofit control levels or new
- 18 control levels, that really doesn't leave a whole
- 19 lot for emission reductions once they discount it
- to that level.
- 21 And so I guess that's -- that's one
- issue that we all need to, as regulatory agencies,
- deal with and come up with the best answers.
- MS. TOWNSEND-SMITH: Thank you.
- 25 COMMISSIONER PERNELL: Where is the cut-

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off line with a small source offset versus just
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- 2 offsets? So you have a -- you stated that you
- 3 have a bank of offsets that is high, and the price
- 4 is -- well, the number is high, and the price is
- 5 high. And then you mentioned a smaller offset
- 6 bank that don't have as many offset opportunities
- 7 in.
- 8 MR. LIM: The small -- the small
- 9 facility bank that I was referring to is a bank
- 10 created and financed by the district itself. And
- 11 its purpose is to help small facilities get the
- same necessary offset credits that other
- facilities get, but only small facilities are
- 14 eligible for.
- 15 COMMISSIONER PERNELL: And what is the
- definition of a small facility?
- 17 MR. LIM: Currently, our definition
- 18 refers to small facilities that emit -- have the
- 19 potential to emit less than five-zero, 50 tons per
- 20 year. And the -- the offset trigger in our
- 21 district is 15 tons per year. So we have
- 22 endeavored to help small facilities that emit
- between 15 and 50. That offset trigger of 15 tons
- 24 depends on the severity of the air quality problem
- in the air basin. So we are moderate. And a more

1 serious basin, like the South Coast District,

- 2 would have a lower offset threshold because the
- 3 emissions problem is more severe.
- 4 COMMISSIONER PERNELL: Right. And I
- 5 thought I heard you say four tons.
- 6 MR. NAZEMI: Right. Under our program,
- 7 under the state law we have to -- or every source
- 8 has to basically show no net emission increase,
- 9 but the South Coast District has provided an
- 10 exemption where we, in turn, provide those offsets
- 11 for the sources that are less than four tons per
- 12 year.
- PRESIDING MEMBER LAURIE: Thank you, Mr.
- 14 Lim, very much.
- Mr. Maul.
- 16 MR. MAUL: Thank you very much.
- 17 As you know, Mr. Mike Tollstrup from the
- 18 Air Resources Board was not able to be here this
- 19 morning, but we're fortunate that George Poppic is
- 20 able to participate this afternoon at very short
- 21 notice, and I understand that he may be willing to
- 22 come up here to the podium and provide a few brief
- 23 comments on ARB's role in looking at offset and
- 24 MERC policy developments.
- So, Mr. Poppic.

1 PRESIDING MEMBER LAURIE: More than

- 2 happy to have you, sir.
- 3 MR. POPPIC: Can I have that topic
- 4 again, please?
- 5 (Laughter.)
- 6 MR. MAUL: Obviously this is a last
- 7 minute stand-up here, but can you provide some
- 8 comments to us about ARB's role in looking at
- 9 offset availability and working with the
- 10 districts?
- MR. POPPIC: Sure.
- 12 PRESIDING MEMBER LAURIE: All during
- 13 this morning's presentation, everybody determined
- 14 that most of the questions were CARB questions, so
- we're looking forward to your few minutes.
- MR. POPPIC: Well, thank you.
- 17 My name is George Poppic. I'm with the
- Office of Legal Affairs for Air Resources Board.
- 19 PRESIDING MEMBER LAURIE: Can you check
- and see if his microphone is on, please.
- 21 COMMISSIONER PERNELL: You might have to
- get a little closer.
- MR. POPPIC: It's on.
- 24 As you know, the governor last week
- issued several executive orders, one which

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pertained to -- directly to the Air Resources
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- 2 Board and, among other things, required it to
- 3 create an emissions offset bank to help facilitate
- 4 the permitting of -- of peaking and other power
- 5 producing facilities.
- 6 We are, of course, now in the process of
- 7 trying to understand what it is we are supposed to
- 8 be doing under that executive order, as well as
- 9 trying to identify as many sources as possible,
- 10 emission reduction sources that we can find.
- 11 Certainly issues have been brought up here. The
- 12 Carl Moyer program offsets over the last couple of
- 13 years is certainly an idea. But we are currently
- 14 working with CEC and trying to develop just what
- can go into that bank.
- 16 PRESIDING MEMBER LAURIE: Now, that only
- 17 applies to peaker plants; right?
- MR. POPPIC: Correct.
- 19 We are also working with the CEC with
- 20 respect to some of the issues under the executive
- orders that were issued them, D26, 25 and 26, in
- 22 terms of expediting the retrofitting -- or, I
- 23 shouldn't say retrofitting -- of increasing power
- of existing facilities as well as permitting new
- 25 facilities to increase current power levels.

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1 Again, those are issues that we are grappling
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- with, the same as -- as your staff. And we are
- 3 working as diligently as possible to determine
- 4 what it is that we can do under these
- 5 circumstances.
- I wish I could be more specific, but
- 7 frankly, we are in the throes of trying to figure
- 8 out, much as you are, what we need to do and where
- 9 we need to go.
- 10 PRESIDING MEMBER LAURIE: Thank you,
- 11 sir.
- 12 Question for you. I'm sorry, did you
- have anything further?
- MR. POPPIC: No.
- 15 PRESIDING MEMBER LAURIE: This morning
- 16 and earlier, we talked about public policy. And I
- 17 think we noted that the enforcement, or the
- 18 implementation of individual district rules, which
- 19 based upon the different basins may have different
- 20 standards among them statewide, could result in
- 21 not only generally speaking land use implications,
- 22 but implications for where power plants might go.
- 23 And the question posed was, for purposes
- of discussion, if it is determined that it is a
- 25 good thing that power plants go where the demand

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1 is, where the load requirement is, and yet if \ensuremath{\text{--}}
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- 2 if that indicates that in the greater urbanized
- 3 areas where these standards are the most
- 4 restrictive, it creates a barrier, or an inhibitor
- 5 to power plants, does that create a conflicting
- 6 public policy. That is, if on the one hand you
- 7 say yeah, we think it's a good idea to have power
- 8 go to where the load is, but the way the rules are
- 9 it provides disincentives to locate heavy
- 10 polluters in the urbanized area where the load is.
- 11 If those are proper assumptions, maybe
- they are, maybe they are not, is that an issue
- 13 that the State of California, through your agency,
- 14 examines? Is that the kind of public policy
- 15 question that you folks have jurisdiction to deal
- 16 with, do you think?
- 17 MR. POPPIC: Fortunately, the Air
- 18 Resources Board pretty much is limited to air --
- 19 air quality issues. Certainly any activity that
- 20 causes a physical impact on the environment will
- 21 necessitate permits from more than one agency.
- 22 Certainly land use permits, as far as -- as power
- 23 plant siting goes, is an essential component of
- 24 getting power plants sited. One of the reasons
- 25 why this Commission is here is with respect to

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1 power plants over 50 megawatts is to reduce that
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- 2 local political effect on siting of power plants.
- But as far as Air Resources Board is
- 4 concerned, the -- the land use aspects of siting
- 5 are severable from the air quality issues, and --
- 6 and we do not get into the land use aspects of
- 7 thermal power plant sitings at all.
- 8 PRESIDING MEMBER LAURIE: Mr. Maul, do
- 9 we have, in response to that answer, is that an
- 10 Energy Commission question? If the Energy
- 11 Commission said good public policy says plants go
- where the load is, proper health policy, air
- 13 emission policy says where the load is where the
- 14 people are have to have stricter standards, which
- 15 could discourage plants. Where does Energy
- 16 Commission jurisdiction come in?
- 17 MR. MAUL: Well, in my humble opinion,
- if you look at the history of the Energy
- 19 Commission, the Commission has taken on these
- 20 kinds of issues, primarily because the law that
- 21 established the Commission is unlike the law that
- 22 establishes most other state agencies. Most state
- agencies are single purpose agencies, whereas the
- 24 Energy Commission tends to be a multi-purpose
- agency looking at not only energy, but

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1 environmental quality and other issues dealing
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- with the general health and welfare of our
- 3 society.
- 4 So we already have inherent in our
- direction and the scope that encompasses our
- 6 Commission the ability to look at a number of
- factors and balance those factors, when to
- 8 consider an energy policy. We've taken those --
- 9 this kind of a strategy for many, many years here
- 10 at the Commission, with efforts, joint efforts
- 11 between ourselves, Air Resources Board, Caltrans,
- 12 and others, looking at the nexus between not only
- air quality and energy, but land use, as well, and
- 14 transportation. Those four components together
- 15 tend to be very closely linked in trying to figure
- 16 out how you deal with societal issues on
- infrastructure, power plants, land use, freeways,
- 18 and air quality impacts.
- 19 So the kind of question you're asking
- 20 actually is one that I believe is one that the
- 21 Commission can address, as long as it does it in
- 22 cooperation with the other agencies that have the
- 23 single purpose objectives that fit into that mold.
- 24 PRESIDING MEMBER LAURIE: Does the
- 25 Commission have override authority on air?

1 MR. MAUL: That's a very sticky issue

- that I would rather not answer.
- 3 PRESIDING MEMBER LAURIE: What's the
- 4 answer?
- 5 MR. MAUL: Mr. Chamberlain is behind us.
- 6 I'd rather have him --
- 7 (Laughter.)
- 8 PRESIDING MEMBER LAURIE: Bill, is there
- 9 a -- do you have an opinion on that question? If
- 10 you don't, that's okay.
- 11 Have we, in our history, addressed that
- 12 question before?
- 13 CHIEF COUNSEL CHAMBERLAIN: The question
- of whether we can override on air quality --
- PRESIDING MEMBER LAURIE: Yes, sir.
- 16 CHIEF COUNSEL CHAMBERLAIN: --
- 17 regulations.
- In general, we have the authority to
- 19 override state and local regulations. To the
- 20 extent that air quality requirements have been
- 21 federalized through the SIP process, we have
- generally considered that we do not have the
- 23 authority to override those requirements. But we
- 24 can, of course, go to the federal government and
- 25 seek from them a different interpretation or a

1 different way of complying, and that is one of the

- 2 ways in which our staff tries to -- tries to work
- 3 these problems out.
- 4 PRESIDING MEMBER LAURIE: Good. Thank
- 5 you.
- 6 Yes, sir.
- 7 MR. NGUYEN: If I can add some comments
- 8 to Commissioner Laurie's concerns about the issue
- 9 of land use and siting, and I think Commissioner
- 10 Pernell had alluded to the demographics issue when
- 11 siting these power plants.
- 12 While the Clean Air Act does not address
- 13 the issue of land use specifically, new source
- 14 review does require that an applicant submit a
- 15 siting analysis in order to get a construction
- 16 permit. And I guess in this -- in this siting
- 17 analysis the applicant has to explain, you know,
- 18 why they chose -- why they chose the location that
- 19 they chose.
- 20 The other federal requirement that may
- 21 have some impact on where a power plant could be
- 22 sited is the 1994 executive order on environmental
- justice, and under that executive order we are
- 24 tasked to ensure that there are no cumulative, you
- know, impacts, undue cumulative impacts on a

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1 community where there's a disproportionate
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- 2 population of low income or minority people.
- 3 PRESIDING MEMBER LAURIE: Which is a
- 4 subject of a further workshop, as a matter of
- fact. Thank you, sir.
- 6 Mr. Maul.
- 7 MR. MAUL: Okay. That basically wraps
- 8 up the presentation we have today with the
- 9 panelists, for at least their prepared remarks.
- 10 And I think they're all available here to answer
- 11 broader questions, or we can --
- 12 PRESIDING MEMBER LAURIE: Thank you. We
- do have some requests from the public, so if you
- folks can just stick around for a minute or two.
- 15 COMMISSIONER PERNELL: I -- before we do
- 16 that, I have one question for the -- for the
- 17 gentleman from CARB.
- 18 We've had discussions throughout the day
- 19 about various air districts and -- and depending
- 20 upon the severity of the air quality in the
- 21 district they have different rules. And I know
- 22 under one of the executive orders CARB is looking
- at peakers. Is there any, in your mind is there
- 24 any differential between the various air
- districts, or are we just going with one solid

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1 rule for -- for siting peakers?
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- MR. POPPIC: The Air Resources Board

 participation with respect to peakers is primarily

 to ensure that local district permits are revised

 to allow maximum operations, hours of operation.

 Our participation with respect to siting is not

 quite as specific. Again, we are more trying to

 work with CEC to expedite the process, your
- 9 certification process, to ensure that the maximum
 10 number of megawatts gets there as soon -- as soon
 11 as you can do it.
- 12 COMMISSIONER PERNELL: That's
- 13 understandable.
- 14 PRESIDING MEMBER LAURIE: Thank you,
- 15 sir.
- Dr. Walthers.
- DR. WALTHERS: Good afternoon,
- Commissioner Laurie and Pernell. I talked with
- 19 you a little bit at lunch, and I'm going to make
- 20 sure that the lady on the right sounds and looks
- 21 like that she's hearing me, so stay close to the
- 22 microphone.
- I want to thank you for this series of
- 24 workshops. I really think you've done a good job,
- 25 along with your staff, of organizing them, and I

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1 was also at the natural gas constraints one, the
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- first one. So I want to commend you personally
- 3 for really getting involved in this one. Your
- 4 line of questioning is extremely important, and I
- 5 actually think you're in a better position than
- 6 perhaps you would feel yourself, given the heat of
- 7 these days on energy.
- I think between the CEC charter, which
- 9 we just talked about a little bit, including from
- 10 your legal counsel, that you -- and I'm trying to
- 11 put myself in your position, and what -- what
- 12 would I really want to do with all this --
- 13 PRESIDING MEMBER LAURIE: I'm not sure
- 14 you want to do that. Maybe you can wait a couple
- of years.
- 16 (Laughter.)
- 17 DR. WALTHERS: What would you really
- want to do with all the kind of information you're
- 19 hearing today? And I believe that you would
- 20 benefit most from a framework of analyzing and
- 21 making decisions from that that I'd recommend to
- 22 you it's called very simply risk based analysis
- and risk based management. It's been embraced by
- 24 a number of agencies. It may not be formalized in
- 25 the CEC. But I believe if you look closely at

indirect.

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what the fundamental principles are of risk based
management, you're going to find a tool that's
going to help you extremely in trying to make
these tough decisions that actually, in effect,
you do make land use decisions. They're just
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But as the CEC and your responsibility to produce and get out electricity, you're making very big social decisions of whether people get rolling blackouts. So when I say risk based management, you have responsibilities that go beyond an example I'm going to give, because my background as an air quality scientist for 30 years and doing permitting of major facilities for the last ten, including ERC acquisitions and also health risk assessments, I'm going to use health risk as an example. But you, I'm afraid, will have to address other things like social impacts of lost jobs, rolling blackouts, public safety, you name it.

But they all can still be handled in a risk based framework, which is why it's a great way to think your way through this. Let me give an example on health risk. I'm going to really encourage you to be as flexible as possible, even

 $1 \hspace{1.5cm} \mbox{with all the comments you've heard pro} \ \mbox{and con on} \\$

- 2 offsets and ERCs and where they come from, and how
- 3 much they are, and how much they can be found.
- 4 An example is from your own staff
- report, let's say a plant of 500 megawatts needs
- 6 100 tons of PM10 per year. That plant then looks
- for offsets. PM10 is a great example of where,
- 8 because of exactly what was mentioned earlier
- 9 today, there are different health effects of big
- 10 particles versus little particles, whether they're
- from farm machines, soil, or whether indeed from
- 12 combustion. And I find that if you were proposed,
- which is why it's nice now that the actual work is
- done by the applicant, you don't have to do all
- 15 the groundwork, you have to just set up the
- 16 framework.
- 17 And what the applicant would do, in my
- 18 mind, is that they'd come to you with, okay, here
- 19 are some PM10 ERCs we're able to obtain at a
- 20 reasonable price. We're now going to give you for
- 21 the rest of our offset requirements basically the
- 22 reduction of diesel exhaust particulate, which has
- been mentioned earlier, has an extremely high
- 24 health risk parameter called the unit risk factor,
- and in fact, if I now give you the reduction of

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diesel trucks, as an example, or marine diesels,
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- 2 either one, and I account for the fact that the
- 3 plant will be there for 30 years and I'm going to
- 4 work with trucks that are good for perhaps ten
- 5 years, I'm going to come up with the amount of
- 6 trucks that I need to get in essence three times
- 7 the ten year effect. And Steve went through the
- 8 little bit of that in San Diego. They went
- 9 through that pattern of thinking.
- 10 The beauty of it is that when I give you
- a risk based analysis, which is part of an AFC if
- it's a full size plant that needs a full AFC, is
- you will basically have the calculations and
- 14 background information you need that allows you to
- 15 show for any doubting Thomas that the reduction of
- 16 diesel exhaust particulate by this particular
- 17 program, with this particular record keeping, with
- this number of trucks, all that kind of thing,
- 19 that you will get health benefits right now for a
- 20 power plant that's going to be putting out 100
- tons of particles per year over 30 years.
- 22 So you have a variety of things that are
- now given to you in the analysis that basically
- 24 support your decision-making, and when you do your
- 25 decision-making on risk based, I don't think

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politicians -- of course, they'll always give you

some hard time -- but aside from politics in a

pure sense, people will not be able to assail the

basis on which you make those decisions. It

allows you now perhaps maximum flexibility of

counting all sorts of sources of ERCs. It allows

for innovations. It allows for all sorts of

engines. You simply are given the data upon which

to make a risk based decision.
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people can argue with it. I don't think

MS. TOWNSEND-SMITH: It sounds good in the ideal world. But as you stated, the Commissioners have to look at a lot of different factors. I mean, we have projects that we can go in and look at the -- the public health benefits and look at the air quality benefits of new projects. But when you have -- look at the socioeconomic aspects of the project, and often the land use aspects, and sometimes incorporate into it the traffic impacts, the community really doesn't want to hear it. Intervenors don't want to hear it. And so even if you have those analysis, a risk based analysis, already provided in the AFC, that doesn't necessarily make the easiest -- you can't make the easiest decision

1 when you have all those factors included in the

- 2 application.
- 3 DR. WALTHERS: I understand. It's not
- 4 -- I understand what you're saying, and it's --
- 5 there's no guarantee in this. But the beauty of
- 6 it is anything that can be quantified is
- quantified. You can't deal with what can't be
- 8 quantified. And what we're dealing with here is
- 9 an offset program which, in fact, one of the five
- 10 requirements in the federal law is that it be
- 11 quantifiable. So when people see your offset
- 12 plan, which is required by law, and then they say
- 13 well, we don't like it because of some other
- 14 factor, the plant is still going to be near us,
- and then you ask okay, what's the problem with
- 16 near you when we are now, in this particular plan
- 17 that's being proposed -- I'll pick out a
- 18 situation.
- 19 A new plant in some place in San Diego.
- Okay? And this new plant obviously has
- 21 neighborhoods around it, people who are always
- going to fight it. Nothing new about that. So
- when they fight it, they're going to say we don't
- 24 want it. A power plant puts out pollution. And
- 25 you say to them we understand that. And, in fact,

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1 not only will the emissions of this overall plan
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- 2 go down because of this offset plan, let us point
- 3 out to you that the diesel reduction of emissions
- 4 in your neighborhoods and your area because of the
- 5 actual truck fleets that are being reduced,
- 6 because these trucks that go by your house,
- 7 they're not trucks up in Carmel, they're trucks in
- 8 San Diego, you actually will experience a health
- 9 benefit because the diesel exhaust particulate
- from these trucks is far more harmful to you than
- 11 would be from the power plant.
- 12 MS. TOWNSEND-SMITH: Trust me. We're
- 13 there. I mean, we still end up with three, four
- 14 hundred people at a hearing. You know. And --
- 15 and you --
- DR. WALTHERS: Sure.
- 17 MS. TOWNSEND-SMITH: It still -- you
- still have -- you're still fighting perception.
- 19 DR. WALTHERS: You can't get away from
- the fact that nobody wants a plant near them.
- 21 Nobody wants a landfill near them. But the CEC,
- and, in fact, we, as professionals, have a
- 23 responsibility that goes beyond that. Those same
- 24 people want their electricity on. And so you do
- 25 have to find a way, and a tool, and that's all I'm

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trying to really present, is a tool, a framework,
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- that allows the CEC in a pretty much a logical
- 3 deductive way to present their case in their
- 4 decision-making.
- 5 The things that can't be quantified and
- 6 are subjective arguments of I don't like, well,
- 7 that's always going to be there. But at least it
- 8 doesn't undo the framework that you've got for
- 9 posing the benefits. Health risk is just a good
- 10 example of what can be quantified these days.
- 11 Thank you.
- 12 PRESIDING MEMBER LAURIE: Do you believe
- 13 there is sufficient flexibility in CEQA to take a
- 14 risk based approach?
- DR. WALTHERS: Oh, yes. In fact, the
- same ten years I talked to you about, almost all
- of my projects have had complete EIR's under CEQA,
- 18 and complete EIS's under NEPA. And under CEQA, it
- is really clear that when you have potential
- 20 impacts, which can be quantified relative to
- 21 ambient air quality standards, health risk
- standards, you name it, you are required under
- 23 CEQA to impose all feasible mitigations. The key
- word is feasible. And so a judgment call has to
- 25 be made of what's reasonable and what isn't.

1	PRESIDING MEMBER LAURIE: In your		
2	experience, is are the federal and state		
3	standards designed to mitigate air impacts?		
4	DR. WALTHERS: Oh, definitely. In fact,		
5	one of the most critical parameters that must be		
6	passed in a CEQA analysis is that you have to show		
7	that the off site impacts of the project will not		
8	exceed ambient air quality standards, will not		
9	make worse an existing violation, things like		
10	that. And so whether it be the federal standards		
11	or the more stringent California standards, that's		
12	a solid part of the analysis.		
13	PRESIDING MEMBER LAURIE: Okay. And		
14	then in your experience, where the Energy		
15	Commission takes a view that we take federal and		
16	state standards and then we do something more if		
17	we feel CEQA requires, is that inconsistent with		
18	your previous statement?		
19	DR. WALTHERS: The CEC may be responding		
20	to certain pressures, and my interpretation of the		
21	law, not having claim to be an attorney, but		
22	having worked with CEQA now for so many years, if		
23	you impose all feasible mitigation measures that		
24	get you to a level of insignificance as defined by		
25	crystal-clear criteria, they're right there in		

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1 front of you, ambient air quality standards is
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- just an example, health risk standards like
- 3 carcinogenic risk is another example, once you're
- 4 below that level by whatever mechanisms were
- 5 proposed either originally by the applicant or
- 6 with the help of others to get them tighter, once
- 7 you're there, then the CEC is taking on its own
- 8 burden of why they would force the applicant to go
- 9 further, because CEQA does not require one to go
- 10 lower and lower and lower below a level of
- 11 significance. CEQA requires you to do everything
- 12 you can feasibly get to a level of insignificance.
- 13 But they don't --
- 14 PRESIDING MEMBER LAURIE: Not all of
- 15 your work is in power plants; right? You do --
- 16 DR. WALTHERS: Power plants, landfills,
- 17 industrial facilities.
- 18 PRESIDING MEMBER LAURIE; Okay. Other
- 19 than power plants, when you work in front of local
- 20 jurisdictions, and a project brings in consistency
- 21 with federal and -- federal and state standards
- through the EIR process, is that deemed CEQA
- 23 mitigated or do local jurisdictions impose their
- own CEQA standards, as well?
- DR. WALTHERS: My experience is that

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1 whether it's with your sister agency, the
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- 2 California Integrated Waste Management Board,
- 3 whether it's the regional water quality control
- 4 boards, or whether it's air quality management
- districts, APCDs and planning departments, once
- 6 you can show you've reached a level of
- 7 insignificance by criteria that are defined in
- 8 different subject areas, we're just talking about
- 9 air today, you're there.
- 10 Now, they may want you to go further,
- 11 and the citizens may want you to go further, but
- there's no legal basis. And, in fact, there's
- 13 absolutely no legal basis for the agencies to
- 14 force you to go further, because that's not what
- 15 CEQA requires. So you're there at that point.
- 16 Now, a company and a participant in a
- 17 project may decide to go further from a business
- 18 viewpoint, because of the way the community talks
- 19 about it, the way the mayor and the council and
- 20 supervisors view it, and the question of whether
- 21 they're going to get approval of three out of five
- votes. I mean, that's the kinds of things that
- exist in the real world.
- 24 PRESIDING MEMBER LAURIE: But when --
- 25 when we receive a recommendation from Staff to go

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1 beyond what we get from the districts in order to
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- 2 meet CEQA compliance, we are in effect saying that
- 3 district -- the district proposal is not CEQA
- 4 sufficient.
- 5 DR. WALTHERS: I'm not here to criticize
- 6 your staff, of course. And so I'm just telling
- 7 you that I do not believe in major industrial
- 8 projects over the years I've worked on them, that
- 9 there is any such requirement to go further.
- 10 PRESIDING MEMBER LAURIE: Thank you,
- 11 sir. Anything else?
- Okay. Let's go to -- thank you, Dr.
- Walthers, very much.
- We had a comment from the NRDC rep from
- 15 this morning. And let me just read it. And I
- 16 don't know if this is from Ms. Ruderman-Feuer or
- 17 somebody else.
- 18 Suggests that ERCs are easily created by
- 19 retrofitting or closing existing power plants.
- 20 For example. Could someone from South Coast
- 21 please discuss the BACT down provision of the
- offset rules, which seem to state that if you
- reduce a facility's emissions either through
- 24 retrofitting or closing that facility, you cannot
- obtain offsets for the amount of the reduction.

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1 You may get offsets for the reduction below
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- 2 current BACT which, for NOx, for example, is now
- 3 so low that essentially there are no offsets
- 4 created.
- 5 Can you respond to that, Mr. Nazemi? Is
- 6 -- is the question clear?
- 7 MR. NAZEMI: Yeah, I believe it is, and
- 8 I'll attempt to respond to it.
- 9 I think the issue of creation of ERCs is
- 10 -- is an important aspect with respect to
- 11 pollutants that are not in a RECLAIM like program.
- 12 And I caveated that earlier when I said that the
- 13 power plants in South Coast actually may be able
- 14 to do everything that Ms. Ruderman-Feuer or NRDC
- is recommending under their auspices of RECLAIM
- 16 Program for nitrogen oxides.
- 17 And the reason that is the case is that
- 18 the program provided a regional cap to look at
- 19 overall emissions from a number of sources, 380 or
- 20 plus, and required that all those sources,
- 21 including new sources that come into the basin,
- 22 maintain their emissions overall below a certain
- cap which was declining through the year 2003.
- 24 But outside the RECLAIM Program, I think
- that would become a difficult prospect, and the

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only way those emissions can be banked as ERCs are
if actually plants go over and beyond today's BACT
or LAER standards, or practically shut down
certain pieces of equipment. And the incremental
difference between what BACT is today and where
they will be after controlling or shutting down
those sources would be the amount of credits that
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8 they could bank.

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We may be revisiting this in the future as part of our overall attempt to address new source review reform. The ex-administration of EPA came out with some recommendations from the NSR reform package that even though it was never finalized and codified into a rule, they wanted to promote agencies and others looking at some of those aspects of it. And as I mentioned earlier, because our -- our district is so severe that we have to have a 1.5 to 1 offset ratio for major sources, part of our negotiated agreement with EPA was that we will require offsets from all sources and we will discount ERCs to BACT levels and all of that, in return for a 1.2 to 1 offset ratio. I think it's not totally out of question to go back and revisit some of those requirements and think of maybe there is a better way to

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1 repackage this and negotiate with EPA what would
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- 2 be appropriate in today's environment, given
- 3 today's energy crisis and other -- other aspects
- 4 associated with that.
- 5 But, Commissioner Laurie, I also had two
- 6 other points that when it's appropriate I would
- 7 like to be able to comment on.
- 8 PRESIDING MEMBER LAURIE: Okay. Well,
- 9 why don't you use that opportunity now.
- 10 MR. NAZEMI: Okay. I think the question
- 11 that was asked earlier about risk based approaches
- and other type of approaches really begs the
- 13 question are we looking at regional impact or are
- 14 we looking at localized impacts. And when you try
- 15 to answer that question, the first thing you need
- 16 to answer is what kind of pollutant you are
- 17 looking at.
- 18 I think for regional pollutants it is
- 19 quite common amongst all regulatory programs, and
- it is easier to explain to the public that
- 21 regional reductions should be sufficient to
- 22 address regional increases in emissions. But for
- pollutants that may have specific local impacts,
- that becomes a more difficult question. And that
- 25 brings up the issue of environmental justice that

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EPA brought up, and I think the one possible
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         answer to that is that you would have to look at
         the emissions impact, or public health impact, and
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         not get bogged down with so much is there a
         disproportionate impact on the low income and
         minorities within that area, but really focus on
         is the impact significant in the first place.
                   If it is not significant, then to go
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         that next step and to decide yes, there is still
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         an unproportionate impact I think might not be
11
         appropriate, and especially for areas such as
         South Coast, where there is a very aggressive new
12
         source review toxic program in place to prevent
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14
         significant toxics impacts to even be brought in
         on new projects.
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16
                   The second point that I want to make --
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                   COMMISSIONER PERNELL: Let me stop you
18
         there. When you talk about insignificant, are you
         talking about health risks or are you talking
19
         about the value of property, or how do you
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         quantify insignificant in terms of risk to a
         community?
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                   MR. NAZEMI: I think the EPA's
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and public health impacts, and does not get

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environmental justice program mainly relies on air

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1 involved so much in property values and things of
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- that sort. So my emphasis is solely on health
- 3 risk impacts.
- 4 The second point that I wanted to make
- 5 was relevant to the earlier discussions we had,
- 6 how do we prioritize offsets availability or use,
- 7 or creation and all, and I think, at least in my
- 8 mind, there's got to be some preferential
- 9 treatment given to situations where an existing
- 10 dirty source is being replaced by a new cleaner
- 11 source of energy. And in those cases, I think you
- can almost argue with the local residents and
- everybody else that the outcome overall is
- 14 beneficial, and therefore it does call for giving
- some sort of a preference or priority.
- 16 And on the same vein, then brings us to
- 17 the next issue, which is environmental dispatch.
- 18 I think it's real important, and South Coast is a
- 19 very big advocate of environmental dispatch when
- 20 it comes to power plants. And what that -- what
- 21 we mean is that the cleanest plant should be
- 22 incentivized to run first and provide the power
- 23 into the grid before the dirtier plants come
- online. I do realize there is a shortage of
- 25 supply, so I'm not suggesting that there is

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1 abundance of supply. But within the framework of
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- 2 signing agreements through various state or other
- 3 regulatory agencies for power contracts, or
- 4 promoting new generation, or somehow controlling
- 5 repowering of existing, I think the concept of
- 6 environmental dispatch is somehow lost.
- 7 If you have that concept in place, then
- 8 you have your cleanest generating facilities that
- 9 require the least amount of offsets have an
- 10 incentive to do that and put on more controls to
- 11 reduce their emissions, therefore the need for
- 12 offsets. You also have addressed the issue of air
- 13 quality, and to the extent that you need the power
- when you need it, you call your clean plants
- 15 first, and then once we get to the emergency
- stage, then bring in your dirtier plants.
- 17 PRESIDING MEMBER LAURIE: Thank you,
- 18 sir.
- 19 Taylor Miller.
- 20 MR. MILLER: Thank you. I'll be very
- 21 brief. We've been at this a long time. I've just
- 22 been taking some notes and I'd like to make a few
- points.
- 24 I'm currently involved in looking for
- offsets for a number of projects, and have done

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that in the past on behalf of the proponents. And
I just wanted to make sure that at the end of the
day you do still have the impression that yes, we
do have a problem. There are some areas that have
larger offset availabilities than others, but I
can tell you that there are applications that I
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have worked on that have been delayed by significant amounts of time just because of

9 looking for offsets.

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I also would like to re-emphasize that if you look at the numbers of credits in banks, you've got to consider also that while the credits might be there, they may not be for sale at any price. And further, that even if they are there, you've got the EPA RACT adjustment upon use policy to deal with, so that the amount that's there may be far less in reality when it's actually used, if it could be purchased.

So I just wanted to re-emphasize we do have an issue, and at least some places, including both southern California and northern California, in my experience, coming to your issue of plants being located in the urban areas, I think we've got to recognize that that is probably -- and I'm not an electrical engineer, but a good policy, at

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least in some sense. And that's where the people
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- 2 are, and that's where the cars and the trucks are.
- 3 And in many cases in California there really isn't
- 4 a lot of industry there besides that.
- 5 So the -- the universe we're dealing
- 6 with of emission sources in some areas, such as,
- for example, in Sacramento, really is cars and
- 8 trucks, in large part. And the stationary sources
- 9 may have been largely already addressed. Now,
- 10 that's not to say that there isn't some out there,
- and there's a lot of searching going on to find
- those opportunities for refit, retrofits.
- 13 So while I -- I know that there has been
- good points raised that with MERCs, mobile source
- 15 to stationary source trades raise issues of time,
- 16 quantification, et cetera, et cetera, I would just
- 17 urge that you keep that on the table and that
- 18 efforts be made collectively to see if we can work
- through those problems.
- 20 So that's my two points I'd like to
- 21 make.
- 22 PRESIDING MEMBER LAURIE: Thank you, Mr.
- 23 Miller.
- 24 COMMISSIONER PERNELL: Let me just
- assure you that we do know that there's a problem.

1 Given the work that Staff is doing and the types

- 2 of briefings that we've been doing to various
- 3 entities, we know that there's a problem.
- 4 MR. MILLER: I didn't really doubt that
- 5 too much. Thank you.
- 6 PRESIDING MEMBER LAURIE: Ms. Simon, did
- 7 you want to have somebody else?
- 8 This is Communities for a Better
- 9 Environment.
- MS. PEESAPATI: Yes.
- 11 PRESIDING MEMBER LAURIE: Good
- 12 afternoon.
- MS. PEESAPATI: Good afternoon.
- 14 PRESIDING MEMBER LAURIE: Could we have
- 15 your name, please.
- 16 MS. PEESAPATI: Sure. My name is Suma
- 17 Peesapati. I'm with Communities for a Better
- 18 Environment.
- 19 I was -- I was very pleased to hear that
- 20 there is an environmental justice workshop being
- 21 planned. Is that correct, did I hear correctly?
- 22 PRESIDING MEMBER LAURIE: There is a
- workshop on local issues, and it will include a
- 24 discussion of environmental justice.
- 25 MS. PEESAPATI: Okay. I'm very pleased

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1 to hear that, because that really is the theme

- behind my very brief comments.
- 3 CBE's fear is that this issue of the
- 4 energy crisis is actually threatening a potential
- 5 environmental justice crisis. And I think a lot
- 6 of the issues that were brought up today relate to
- 7 environmental justice, specifically siting issues.
- 8 You know, we talk about siting facilities in load
- 9 centers. Well, we also have to look at where the
- 10 industrial locations are in those centers. And
- 11 those tend to be in low income communities of
- 12 color. And that's true throughout the state.
- 13 Also, when we talk about mobile to
- 14 stationary source trades, I mean, they're legal.
- 15 But under the federal Clean Air Act, mobile to
- 16 stationary source trading is legal. But there's
- 17 also a policy issue that relates to environmental
- 18 justice with mobile to stationary source trading.
- 19 Yes, it's true that a lot of the
- 20 communities that are housing large numbers of
- 21 stationary sources are also suffering from
- 22 exposure to mobile sources. But the reality is
- mobile sources are everywhere. And when you use
- reductions from a large geographic area,
- 25 reductions that are equally distributed amongst a

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1 population, and you use that to justify specific
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- 2 increases in concentrated areas, that's a policy
- 3 problem.
- 4 Secondly, there is also another
- 5 underlying policy behind the federal Clean Air
- 6 Act's restraint of -- of the -- of credits being
- 7 generated from stationary sources, and that is
- 8 because pollution credit programs are economic
- 9 incentive programs. If the price of credits
- 10 cannot be maintained at some healthy level, there
- 11 is no incentive to find innovative ways to reduce
- 12 pollution. That is the point of pollution credit
- programs, to find innovative ways to reduce
- 14 pollution.
- So to the extent that you expand
- 16 programs to include mobile credits to artificially
- drive down the price of credits, you are
- 18 eliminating that incentive.
- 19 One more issue regarding siting
- 20 restrictions based on toxic pollution. Some of
- 21 the major types of pollution that we're concerned
- about in regards to power plants are nitrogen
- oxides and particulate matter, PM10. Those aren't
- 24 considered toxics, from my understanding of -- of
- 25 district rules. So those aren't -- those types of

1 pollution aren't affected by restrictions based on

- 2 toxic chemicals.
- 3 So that's the main gist of -- of what I
- 4 wanted to say. And, again, I'm very pleased to
- 5 hear that there will be a further discussion on
- 6 EJ.
- 7 PRESIDING MEMBER LAURIE: Thank you,
- 8 ma'am.
- 9 COMMISSIONER PERNELL: Thank you.
- 10 PRESIDING MEMBER LAURIE: Anybody else?
- Mr. Chamberlain.
- 12 CHIEF COUNSEL CHAMBERLAIN: Yes. I
- think this has been an excellent workshop.
- 14 I was struck by the fact that it seemed
- as if we were discussing all this morning and this
- 16 afternoon an elegant regulatory scheme that is
- driving toward obviously a goal that we all want,
- 18 clean air and public health and safety. But it
- 19 appears that we're entering into a new time in
- 20 which we may have to make some choices that are
- 21 difficult.
- 22 One of the things that concerns me about
- what I heard this morning was it sounded, and
- 24 perhaps I misunderstood, but it sounded as if
- 25 every one of the air districts has some threshold

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level below which they don't regulate. And if
that's the case, then I think that as we enter
into a period in which there may be substantial
periods of lack of availability of electricity, we
could wind up with a very difficult choice here.
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Let me give you a scenario that I think

we may be facing within the next few weeks. There

is a shortage of turbines that can produce the

kind of NOx that we like to see, at or below five

ppm. And so some of the parties that may come to

this Commission and ask for emergency siting of

peaking facilities may come to us with turbines

that we normally would not want to -- to site.

They may have emissions of, say, 25 ppm.

is that doesn't meet our requirements, or we can't give you adequate offsets for your 25 megawatt facility, and the result is extensive periods of blackouts, I believe that what will happen is that many members of the public will decide that they simply cannot tolerate the blackouts and they will go and they will buy their own five kilowatt gasoline or diesel fired generator. And if we have 5,000 of those coming online instead of that 25 megawatt project, it doesn't take very many

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1 hours before we've made a very bad bargain.
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- 2 So I think that's the challenge that
- faces us all now. And I don't know whether the
- 4 air agencies could even practically try to control
- 5 those five kilowatt generators, but if they can't,
- 6 then it seems to me that there's quite an Achilles
- 7 heel in the regulatory scheme that we've been
- 8 talking about.
- 9 PRESIDING MEMBER LAURIE: Thank you,
- 10 sir.
- 11 Anybody desire to comment? If there's
- no additional comment, Commissioner Pernell --
- 13 yes, sir.
- MR. POPPIC: Commissioner, I'm sorry.
- 15 George Poppic again. I think now I'm addressing
- 16 you more as an attorney who's practiced in land
- 17 use and environmental law for over 20 years than a
- 18 counsel for ARB.
- Both this morning and this afternoon in
- 20 the context of discussing CEQA, you've asked the
- 21 question what do I do when Staff is bringing me a
- 22 proposal that takes me beyond basically what has
- been required by an air district. And I think
- 24 it's important that you understand districts are
- 25 fairly well constrained in what they can and

- 1 cannot permit.
- 2 Let me give you an example.
- 3 Preconstruction emissions, offroad emissions.
- 4 These are things that a district cannot take into
- 5 account when they permit a stationary source.
- 6 Nevertheless, those emissions can be substantial,
- 7 and it is not only a possibility but I feel a
- 8 duty, under CEQA, to take those emissions and to
- 9 account when you are mitigating the project as a
- 10 whole. So it is -- it is very -- my concern is to
- 11 equate mitigating to insignificance with having a
- district fully permit the air quality aspects of a
- 13 project.
- 14 It is one thing to look at a district
- 15 regulatory structure in terms of ascertaining
- 16 levels of significance. If I don't trigger
- offsets, do I have a project that has a
- 18 significant adverse air impact. That's one issue.
- 19 But it is an entirely different issue to say well,
- 20 because the district has completed its permitting
- 21 process I have therefore done everything I can. I
- have taken all feasible mitigation measures with
- 23 respect to the air impacts. That is not always
- true, because, again, of the limitations of the
- 25 scope of district regulations.

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1 So I --
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- 2 PRESIDING MEMBER LAURIE: Very helpful.
- 3 Thank you very much.
- 4 Okay. With that, Commissioner Pernell,
- 5 do you have any closing comments?
- 6 COMMISSIONER PERNELL: Well, I'd like to
- 7 thank the panel that -- both the morning and
- 8 afternoon. I think it was great discussion. You
- 9 know, these types of dialogues are very helpful to
- us as Commissioners. Also, Staff for putting this
- 11 together, and all of you out there who have
- 12 stayed. You had a 20 minute lunch, and -- and
- back here to discuss issues that are of -- of
- grave concern for the state.
- 15 So we have other workshops scheduled,
- 16 and I'm sure you will find the schedule outside.
- And I want to take the opportunity to thank my
- 18 colleague here for coming up with these workshops,
- 19 and this idea. But it's very imformative. It's
- 20 informative to me. I will take all of the
- 21 suggestions and comments and do a in depth thought
- 22 about -- some in depth thought about the effects
- 23 it has on individual stakeholders, air districts,
- agencies, and particularly us.
- 25 So thank you again for being here, and I

- look forward to seeing you at the next one.
- 2 PRESIDING MEMBER LAURIE: I'd just like
- 3 to echo Commissioner Pernell's comments.
- 4 Throughout these workshops we have heard the most
- 5 impressive presentations from ladies and gentlemen
- 6 like yourselves, who are knowledgeable, competent
- 7 and articulate, and it's been a wonderful
- 8 education which, if we do our job right, we will
- 9 share with others within this building.
- 10 Mr. Maul, did you have a comment?
- 11 MR. MAUL: I just wanted to add to your
- 12 comments and express my personal appreciation for
- 13 the members of our panel who have come here. This
- is an extremely busy time for all of them, because
- of the situation we're in. They have very hectic
- 16 schedules, and I know a number of you have had a
- 17 chance -- had a need to move your schedules around
- to meet today's hearing schedule. We very deeply
- 19 appreciate your attendance and comments today.
- 20 PRESIDING MEMBER LAURIE; Yeah, but they
- got a chance to be on the Internet. Hey, that's,
- you know, that's good.
- 23 (Laughter.)
- 24 PRESIDING MEMBER LAURIE: Ladies and
- 25 gentlemen, the meeting will be adjourned, and our

1	deep than	ks.
2		Thank you very much.
3		(Thereupon the Workshop was
4		concluded at 4:04 p.m.)
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CERTIFICATE OF REPORTER

I, VALORIE PHILLIPS, an Electronic

Reporter, do hereby certify that I am a

disinterested person herein; that I recorded the

foregoing California Energy Commission Workshop;

that it was thereafter transcribed into

typewriting.

I further certify that I am not of counsel or attorney for any of the parties to said Workshop, not in any way interested in the outcome of said Workshop.

IN WITNESS WHEREOF, I have hereunto set my hand this 26th day of February, 2001.

VALORIE PHILLIPS

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